

LUFTWAFFE COLOURS
Volume Five Section 4

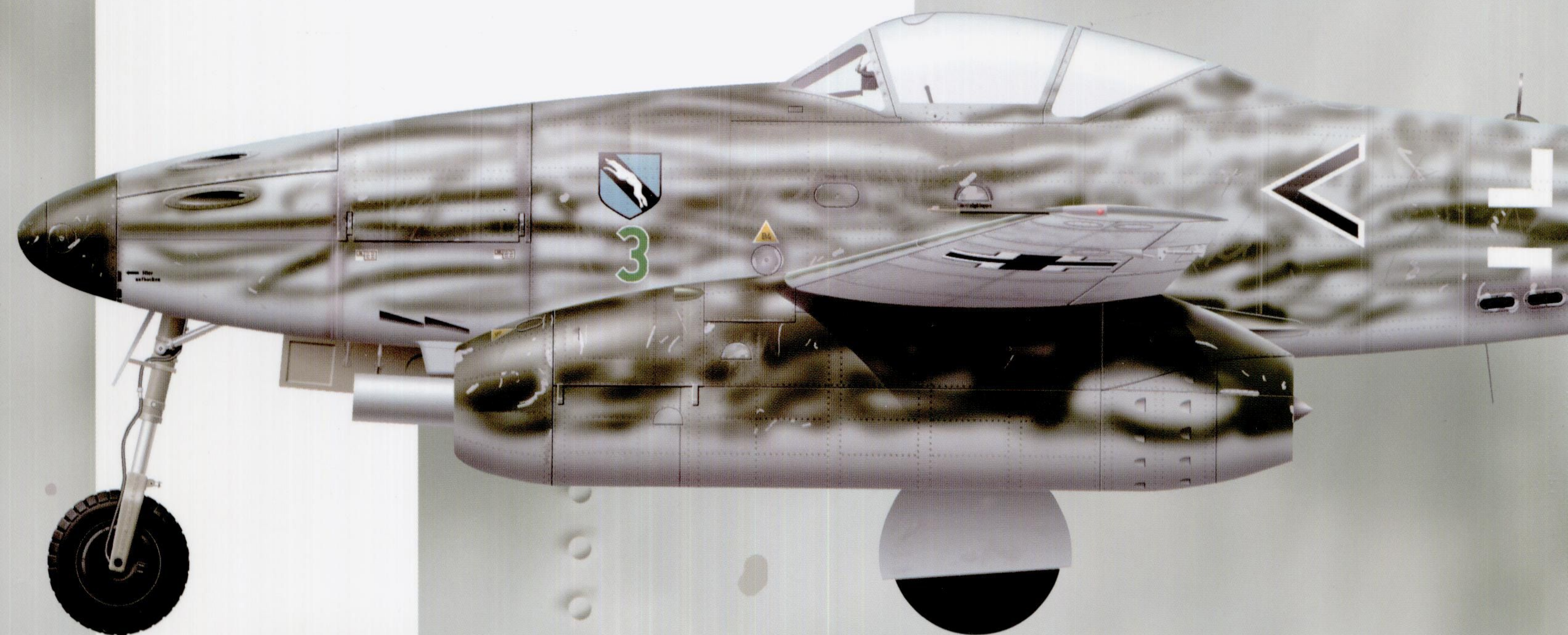


JAGDWAFFE

**J Richard Smith
& Eddie J Creek**

**JET FIGHTERS
AND ROCKET
INTERCEPTORS**

1944-1945

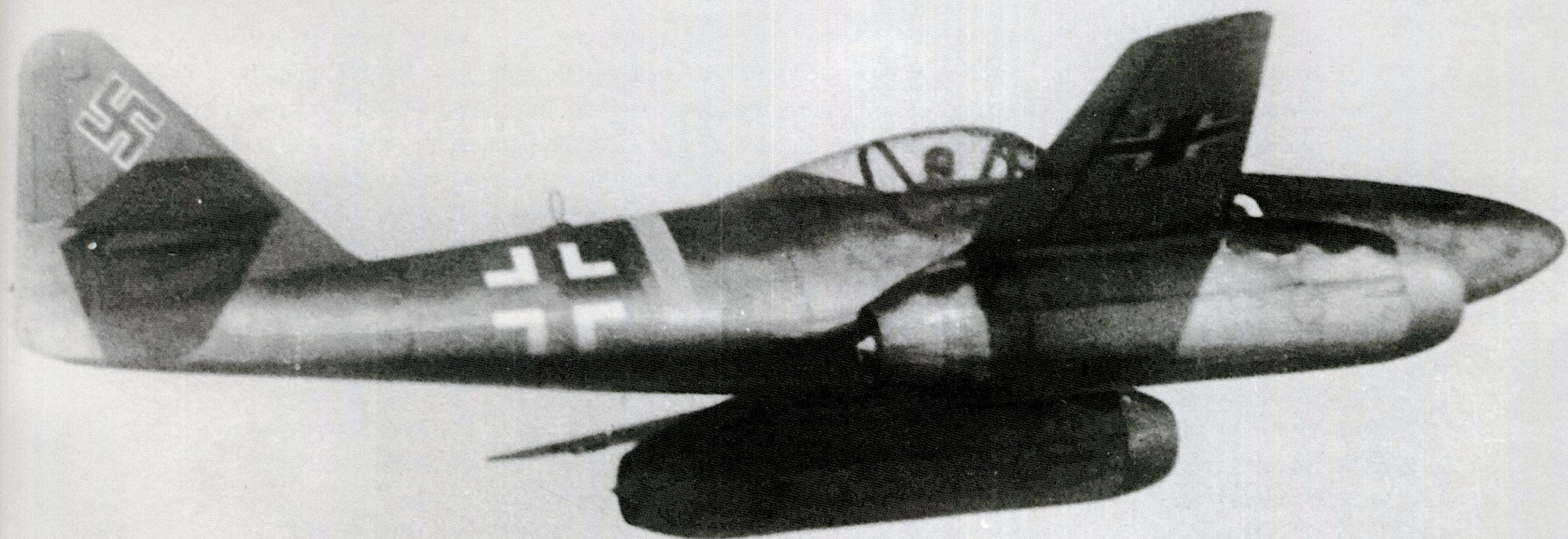


JET FIGHTERS AND ROCKET INTERCEPTORS

"Everything depends on air supremacy, everything else must take second place. Supremacy of the sea is only an appendage of air supremacy... The requirements for maintaining air supremacy are decisive in all questions of organisation, relative strength, allotment of manpower and supplies..."

"We have been beaten and eliminated, we have nothing more to say. But it will be interesting to watch the development of the Great Powers and the battle of wits. Will it be as it has always been, that they all, every one of them, will not learn from the past and will continue to make the old mistakes again and again?"

General der Flieger Karl Koller,
Chief of the Luftwaffe General Staff,
November 1944-May 1945



Rocket Development 1926-1939

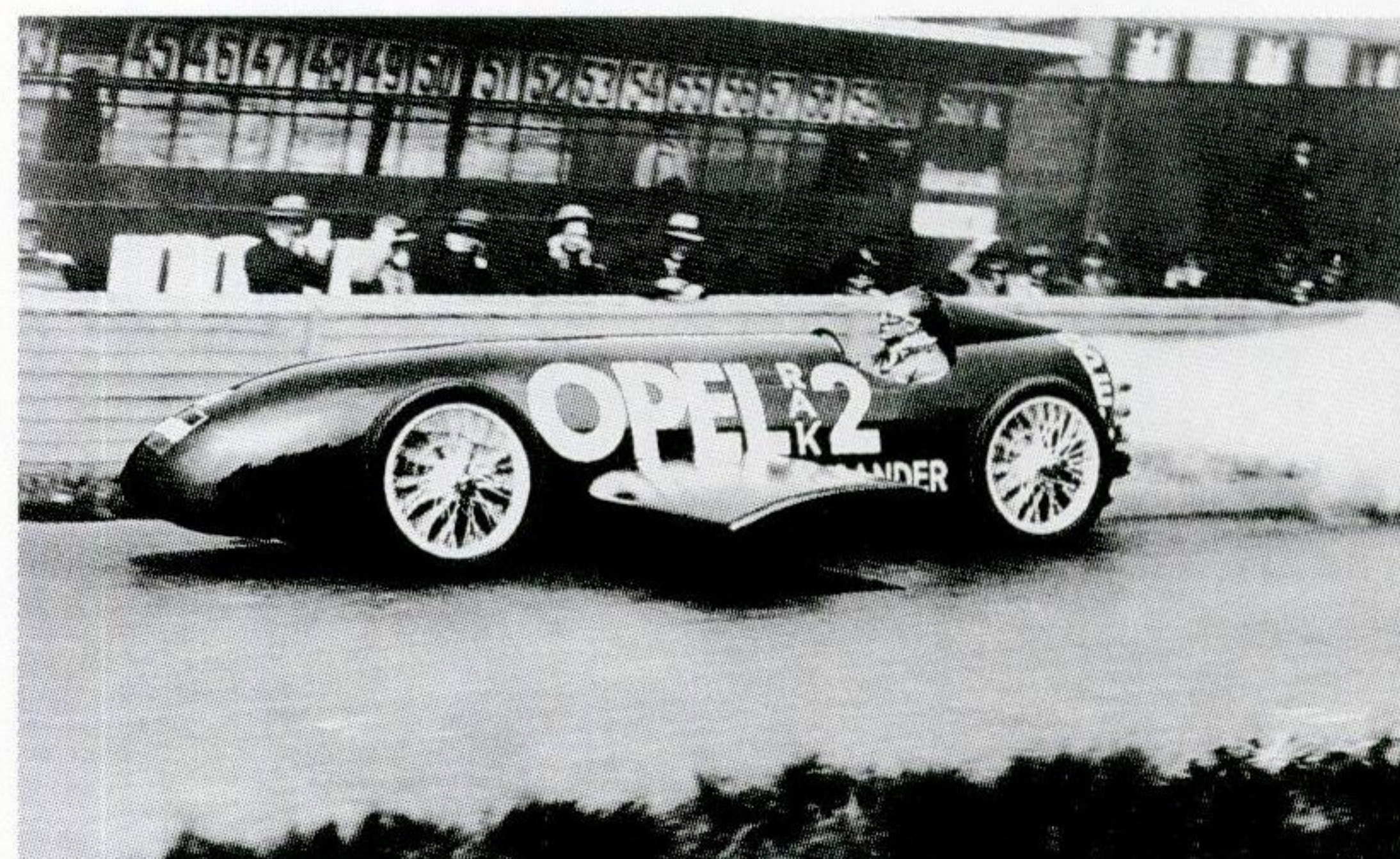
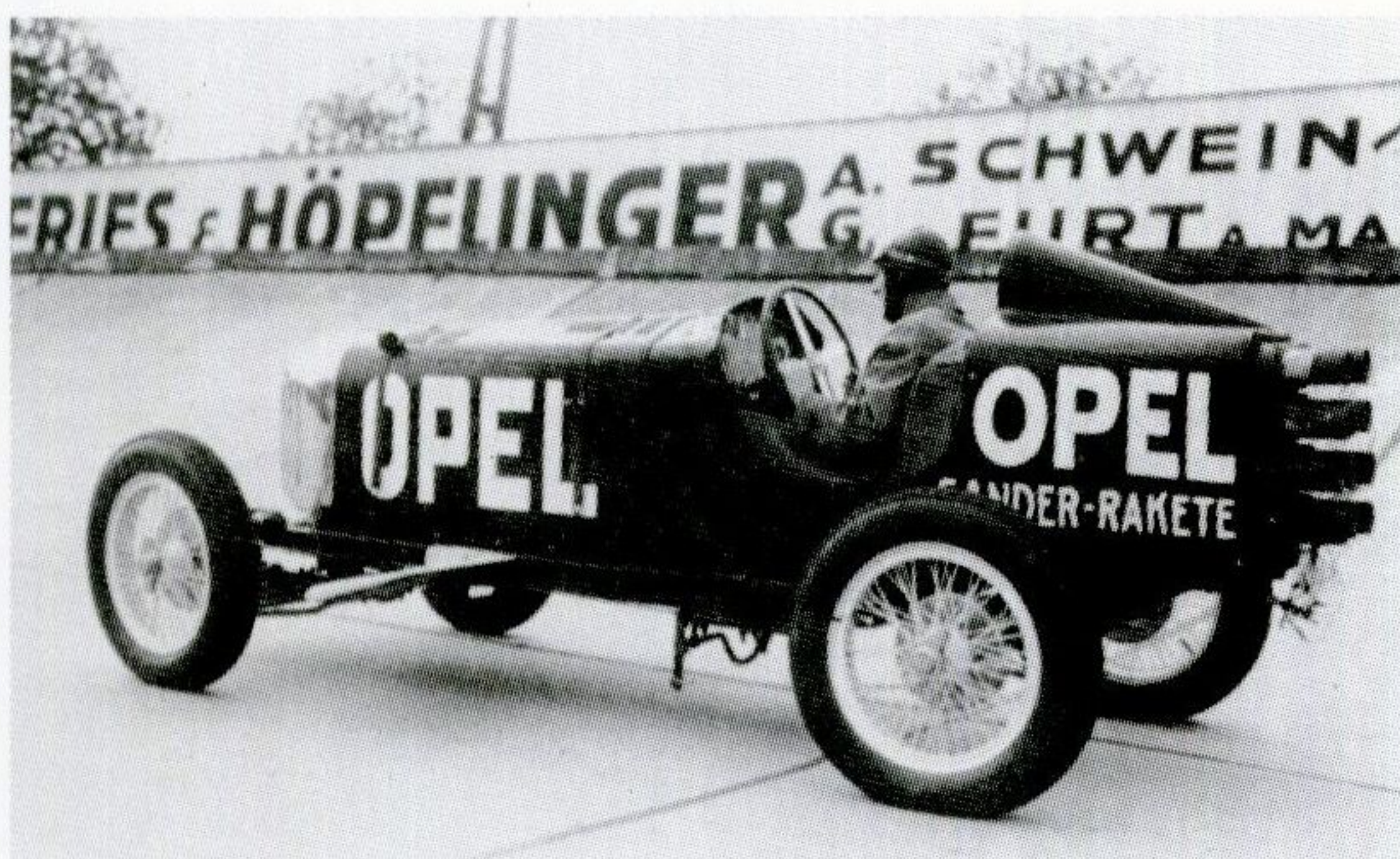
“Our success in 1941 was crowned by Heini flying faster than 1,000 km/h. At just over 1,000 km/h the shock wave caused the airflow over the outer wing to separate suddenly and the aircraft pitched nose down, the instruments registering a negative acceleration of 11g. Heini pulled the throttle back quickly, the aircraft slowed down and he was able to take control again.”

Dr. Alexander Lippisch on the flight of the Me 163 A V4 on 2 October 1941

The 1919 Treaty of Versailles had placed draconian restrictions on the development of aircraft and aero-engines in Germany. By 1926, however, Germany was finding ways around these restrictions, not least by its pioneering work in the development of rocket, turbojet and ramjet engines. The first two of these were eventually used to power operational fighters for the *Jagdwaaffe*.

Theoretical work on rocket engines and space travel can be said to have begun in Germany in 1926 with the formation of the *Verein für Raumschiffahrt* (VfR or Society for Spaceship Travel) in Breslau. Early members of the VfR included Max Valier, Hermann Oberth and Wernher von Braun. On 8 September 1927, Valier signed a contract with Opel to begin the development of a rocket-propelled aircraft. The first phase of this project was the testing of a rocket-propelled car. The car, the *Opel-RAK 1*, made its first run on 11 April 1928 and during the following day, it achieved a speed of 100 km/h (62 mph). A second rocket-driven car, the *Opel-RAK 2*, achieved between 200 and 235 km/h (124 and 146 mph) on 28 May, but two versions of a third design, which ran on rails, both blew up during tests.

RIGHT: The Opel RAK 1 rocket-propelled car was first tested on 11 April 1928 at Rüsselsheim. Next day, with Kurt Volkhardt at the wheel, it achieved a speed of 100 km/h (62 mph) which brought enormous publicity for this type of propulsion.

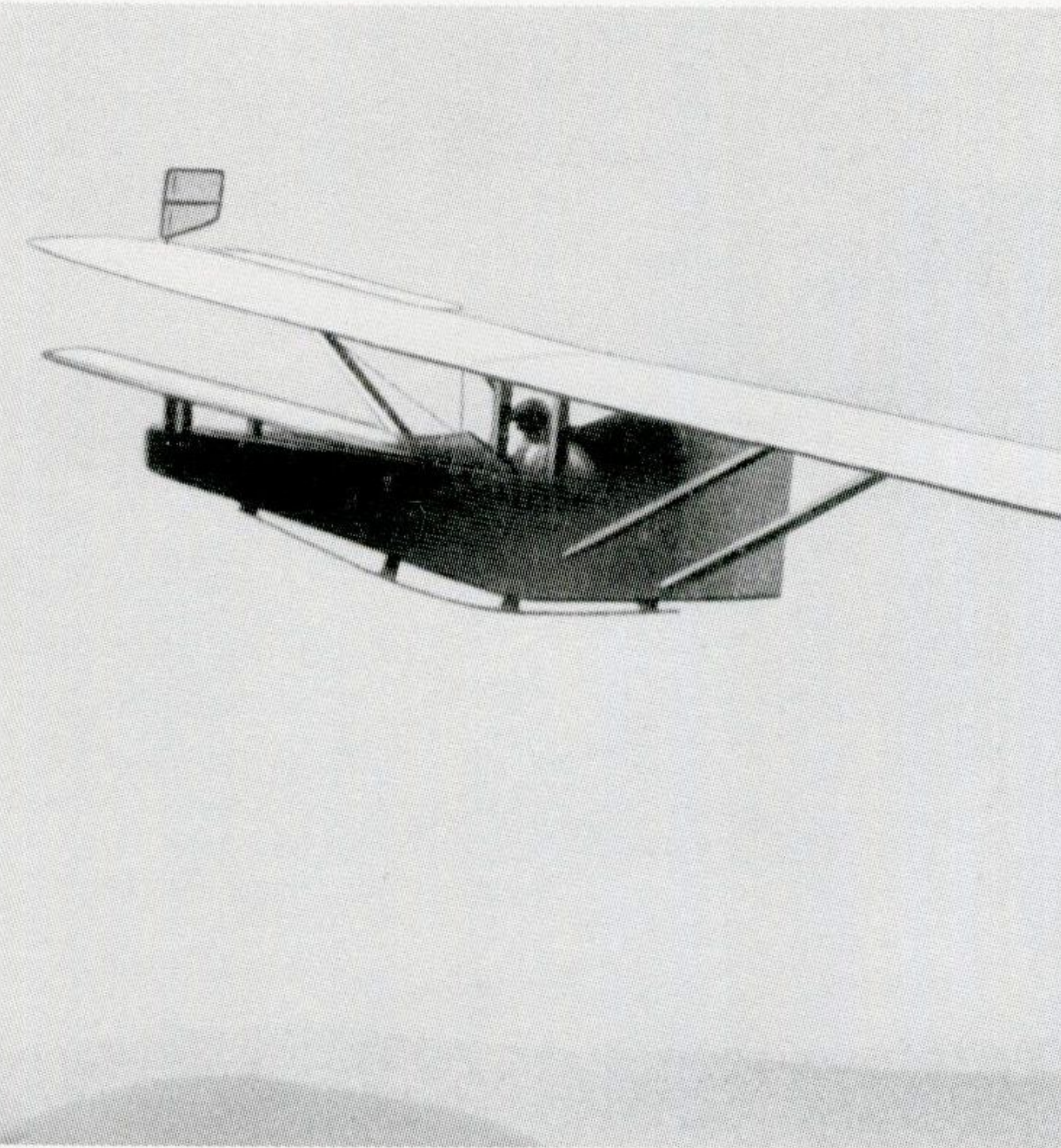


LEFT: The much improved Opel RAK 2 achieved some 235 km/h (146 mph) while driven by Fritz Opel at the Avus test track in Berlin on 23 May 1928. There was a subsequent plan for the car to make an attempt on the world land speed record, but this was abandoned after Opel and 'Max' Valier dissolved their partnership.

Tests were also being carried out with rocket-propelled model aircraft. During these it was discovered that tailless designs would be the ideal form for this method of propulsion. The first piloted rocket-propelled aircraft to be flown in Germany was the Raab-Katzenstein *Ente* (J-W 5-4 003). This was a tail-first design powered by two 20 kg (44 lb) thrust Sander engines. It almost certainly made its first flight on 11 June 1928. For this, and for later experiments with other rocket-propelled gliders, the aircraft used the bungee launch technique. Just afterwards, an Espenlaub E 7 glider, which was modified by the addition of a Sander rocket engine, was also tested. Its success resulted in the VfR asking the designer, Gottlob Espenlaub, to build a tailless aircraft, the E 15, to be powered by two 17 kg (37 lb) thrust rocket engines. This design made a number of successful flights during the late spring of 1929, again using a bungee for launch. A little later, in September 1929, the *Opel-Sander Rak 1* rocket-powered glider carried out several test flights, but disputes among the rocket pioneers resulted in little further work being carried out on this method of propulsion until 1935. Some trials were, however, carried out by Junkers with solid fuel rockets to boost the take off of an overloaded W 33 transport, and later with a liquid fuel engine fitted to an A 50 Junior.

On 10 May 1935, Major Wolfram Freiherr von Richthofen of the *Reichsluftfahrtministerium* (RLM or German Aviation Ministry) proposed to *Hptm.* Leo Zanssen of the *Heereswaffenamt* (HWA or Army Ordnance Board) the development of a rocket-propelled aircraft to intercept high-flying enemy bombers. This was to signal the beginning of serious, and secret, rocket engine development.

In 1936 the first tests were carried out with a liquid-fuelled engine attached to a He 72 biplane. This engine, developed by Hellmuth Walter, used hydrogen peroxide and a paste catalyst and was designed to give a thrust of about 135 kg (300 lb) for 45 seconds. The success of the modified He 72 prompted Heinkel to donate an He 112 fighter airframe for ground tests. These somewhat dangerous trials were conducted with a von Braun rocket engine which eventually produced 1,000 kg (2,200 lbs)



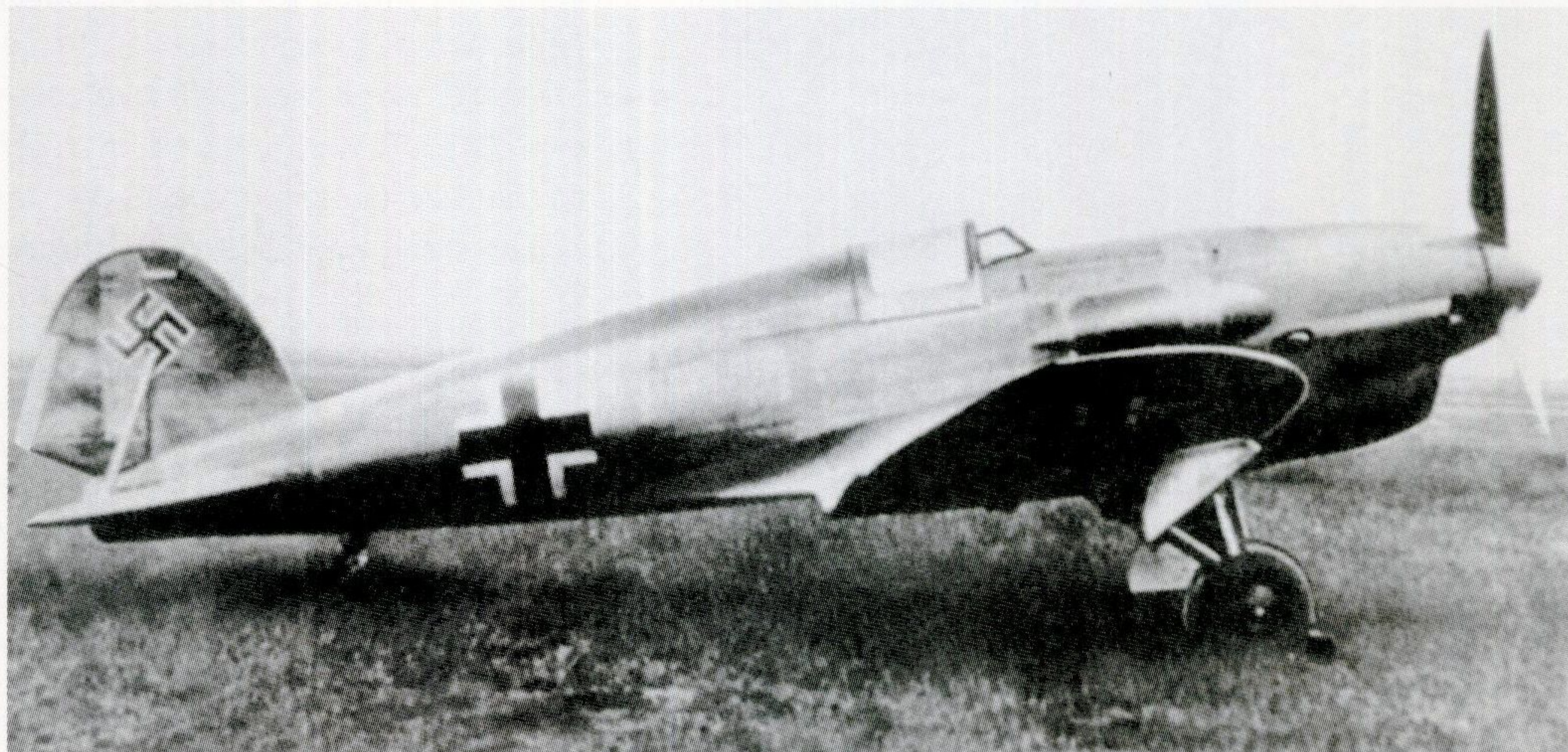
ABOVE: The tail-first Raab-Katzenstein Ente was the first piloted rocket-propelled aircraft to be flown in Germany. After several abortive attempts, the aircraft made its first 60-80 second flight on 11 June 1928 powered by two 20 kg (44 lb) thrust Sander engines. A second flight on that day was abandoned after one of the engines exploded, and set light to the rear fuselage.

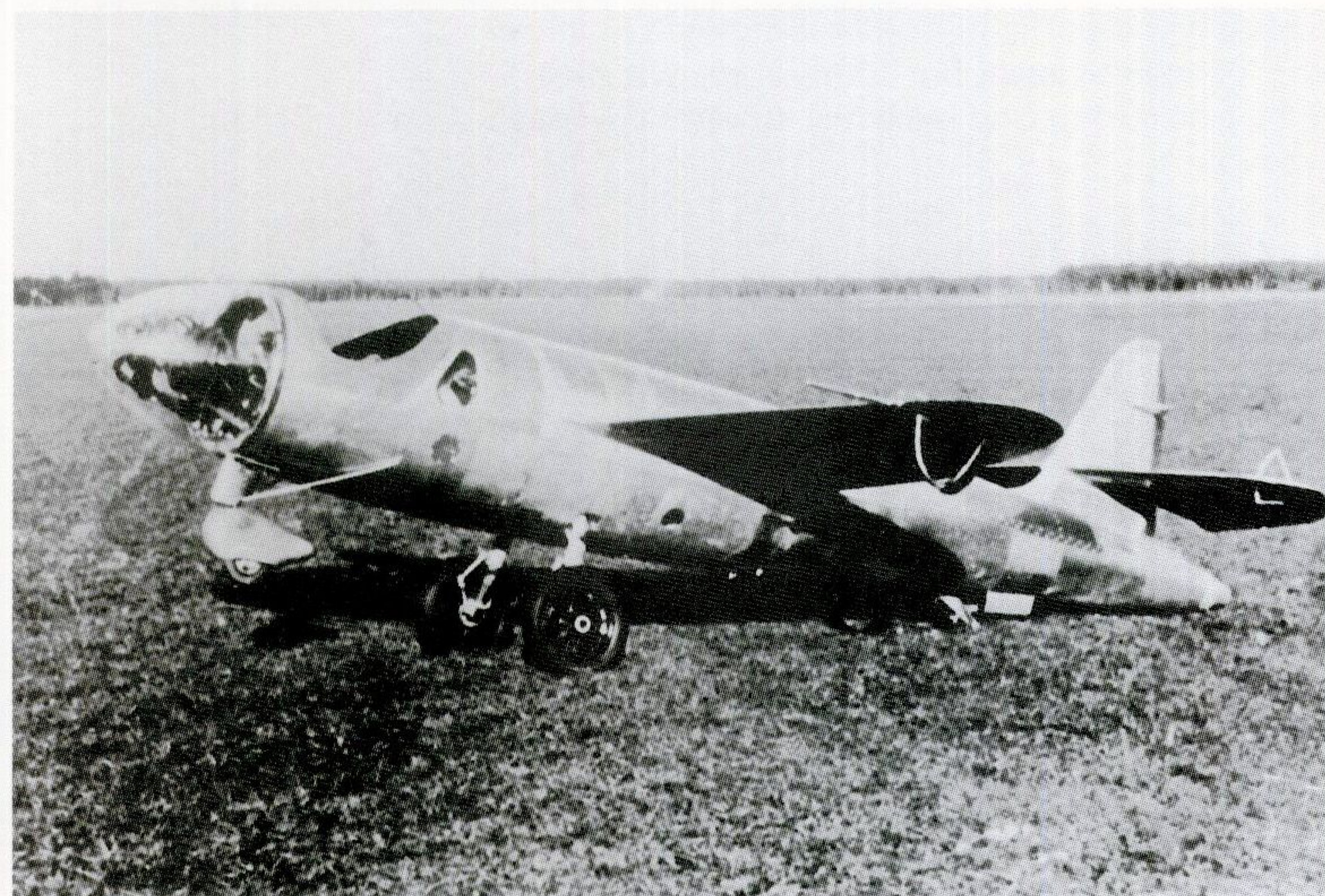
BELOW: Some of the hazards of early rocket flight! Gottlob Espenlaub examines the damage to the rudder of the E 7 which caught fire during a first test flight on 29 October 1929. Although he managed to land safely, the asbestos covering failed to prevent the damage shown.



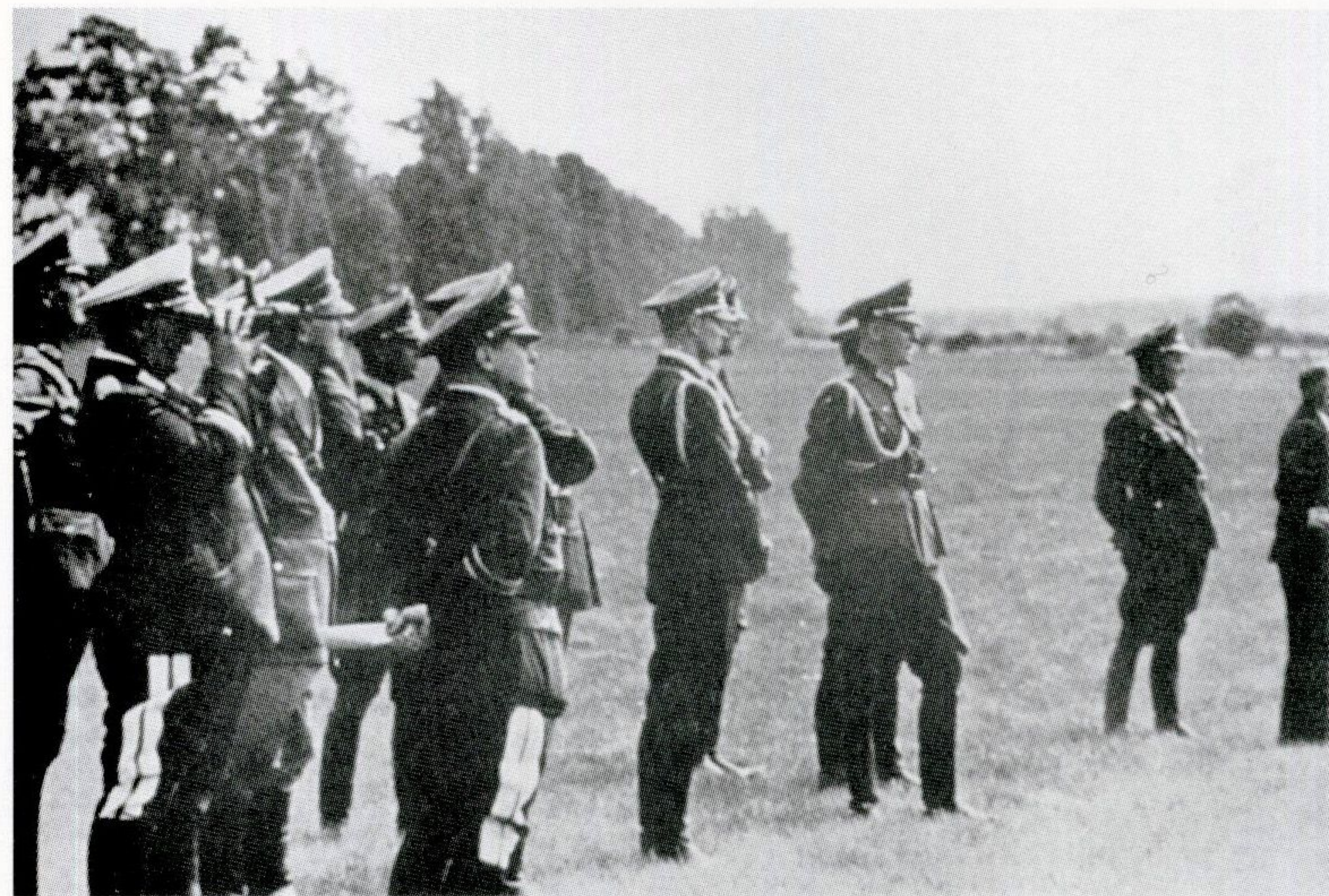
LEFT: The Opel-Sander Rak 1 was designed by Julius Hatry, but Opel ignored his contribution when claiming that he had made the world's first rocket flight with the aircraft in September 1929. This photograph was taken before Hatry's name, painted on the vertical tail surfaces, was obliterated.

RIGHT: Successful tests with a He 72 biplane fitted with an early Walter rocket engine led Ernst Heinkel to donate two He 112 fighters for further experiments. These were fitted with 1,000 kg (2,200 lb) thrust engines, and one was successfully flown for some years.





ABOVE: The He 176 was the first purpose-built rocket-propelled interceptor. It was powered by a 500 kg (1,100 lb) thrust Walter RI engine and made its first test flights during the summer of 1938 piloted by Erich Warsitz. This is the only known photograph of the aircraft.



ABOVE: A group of high-ranking officials watch at the Rechlin Experimental Centre as the He 176 is demonstrated. Members of the uniformed group from left to right are Wilhelm Keitel, Chief of Staff of the Oberkommando der Wehrmacht; Hermann Göring, Adolf Hitler, Hans Jeschonnek, head of the Operations Staff of the Luftwaffe General Staff and Ernst Udet, Director of the Technical Department of the RLM.

thrust for 30 seconds. They began in the spring of 1937 but, during a final static test, the rocket engine exploded, severely damaging the airframe. Fortunately, the pilot, *Flugkapitän* Erich Warsitz, escaped unhurt and subsequently made the first rocket-propelled flight in a second He 112 at the end of the year from Kummersdorf. Tests continued with the aircraft until 18 June 1940 when the rocket combustion chamber burned through and melted the elevator control rods. This caused the aircraft to go out of control and crash. The pilot on that flight, *Flugbaumeister* Gerd Riens, was killed.

The potential of the rocket-propelled He 112 coupled with the interest of the RLM prompted Heinkel to begin development of an experimental rocket-driven interceptor under the designation He 176. Work on the new aircraft began in December 1936 with the first detail drawings being issued in July 1937. The aircraft was to be powered by a throttle controlled 500 kg (1,100 lb) thrust Walter RI engine which used a combination of *T-Stoff* (hydrogen peroxide) and *Z-Stoff* (sodium or calcium permanganate) as fuel. Following towing trials behind a Mercedes car, the He 176 made at least 48 flights probably between the late summer of 1938 and 8 November 1939, including one before Hitler. Work on the He 176 was officially terminated on 12 September 1939, but flight testing continued for a few more months.

Dr. Alexander Lippisch and Gottlob Espenlaub began the development of a series of tailless gliders during the 1920s. Much of their work was influenced by the ideas of Friedrich Wenk. In 1925 Lippisch joined the *Rhön-Rossitten-Gesellschaft* (which later became the *Deutsche Forschungsanstalt für Segelflug* or German Research Institute for Gliders. He then began producing a series of nine *Storch* tailless aircraft two years later.

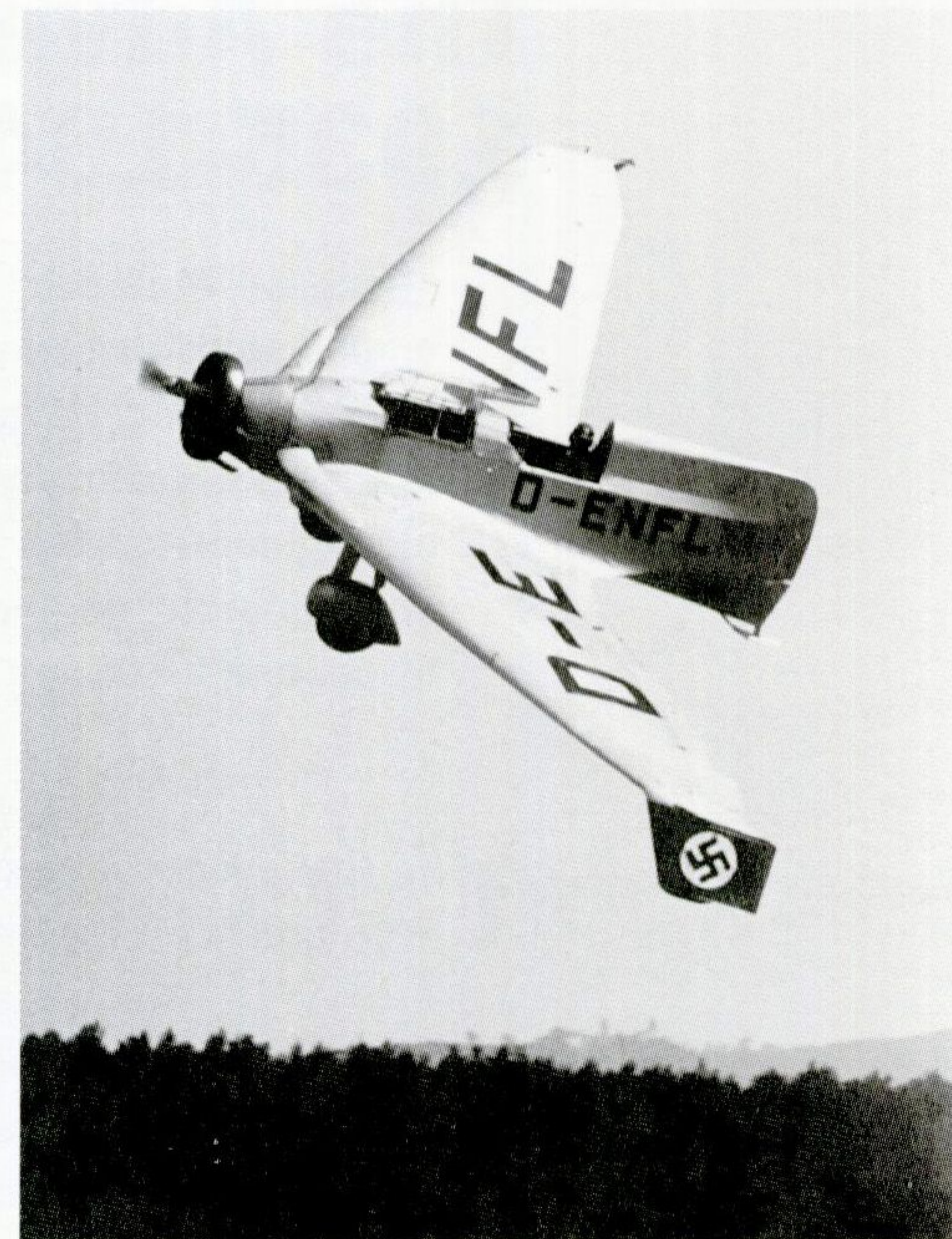
In 1929 Lippisch developed a more advanced tailless aircraft which he named the *Delta I*. This, as its name suggested, utilised a delta shaped wing, to which endplate fins and rudders were attached. The *Delta I* glider made its first flight on 30 August 1930 and its success was such that, with the help of the Messerschmitt director, Theo Croneiss, Lippisch's team were able to fit the aircraft with a small piston engine. The aircraft first flew with this on 14 May 1931 and subsequently carried out a number of successful demonstration flights.



The next successful design to be produced by Lippisch was the *Delta III* which was built by Focke-Wulf and flown for the first time in 1933. It was followed, in 1937, by the *Delta IV* which was given the RLM designation DFS 39. Testing of this aircraft and the advanced flying wing DFS 40 led to an old RLM requirement for a

LEFT: Dr. Alexander Lippisch began work as an aerodynamicist at the Dornier factory during the First World War and, in 1921, took a similar post with Fritz Schweizer who was attempting to build a glider to take part in that year's Rhön glider competition. He later worked with Espenlaub on tailless gliders and then on his own Delta series of designs, this work culminating in the design of the Me 163. After leaving Deutsche Forschungsanstalt für Segelflug he took up employment with Messerschmitt in January 1939, but left in 1943 after his Department L was absorbed by the main company. He then continued to develop his own designs, perhaps the most spectacular of which was the LP 13a Delta which was intended to be supersonic.

1944-1945

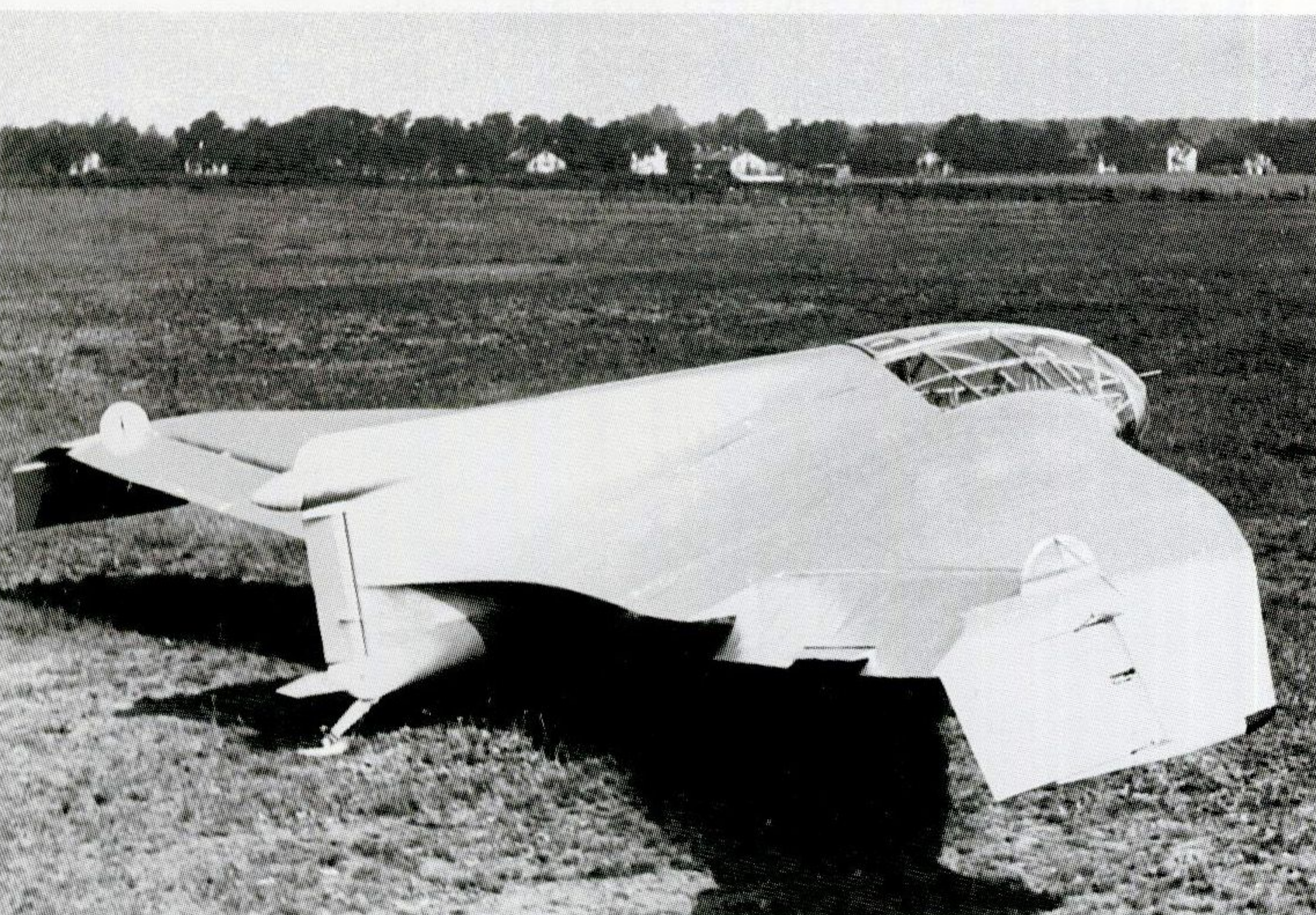


ABOVE: The Delta I was designed by Lippisch and powered, initially, by a 30 hp Bristol Cherub engine. It was demonstrated at Berlin-Tempelhof in September 1931, but the pilot, Hermann Köhl mishandled it during a test flight which caused him to criticise the design. This resulted in him being alienated from the designer, Lippisch.

pusher-engined fighter being revived under the designation DFS 194. Developed from the *Delta IVd*, the DFS 194 was first completed as a glider. It was test flown during the autumn of 1938. In the following spring Lippisch joined the Messerschmitt company at Augsburg and shortly afterwards the DFS 194 was equipped with an experimental 300 kg thrust rocket engine. The first flight of the rocket-propelled variant was delayed for various reasons until 3 June 1940, the aircraft achieving a speed of 550 km/h (342 mph) during one of its last tests.

Considerable testing of the DFS 194 followed, most flights being carried out by the experienced glider pilots Heini Dittmar and Rudi Opitz at Peenemünde. Work on the DFS 194 led to the development of an improved version, the Messerschmitt Me 163. The first flight of the initially unpowered prototype, the Me 163 A V4, was made on 13 February 1941, the aircraft being towed by a Bf 110 twin-engined fighter. It was not until 13 August 1941 that the Me 163 A V4 made its first powered flight using a Walter R-II-203 (109-509 A) rocket. The thrust of this engine could be varied between 150 and 750 kg (330 and 1,650 lbs) and during a test on 2 October 1941 the aircraft attained a speed of 1,003 km/h (623 mph). The success of the prototype led to the production of a small batch of Me 163 As. These were followed by the definitive model, the Me 163 B. This had a considerably modified fuselage and was powered by the 1,700 kg (3,750 lbs) thrust Walter R-II-211 (109-509 B). It carried an armament of two 20 mm MG 151 or two 30 mm MK 108 cannon in the wing roots.

ABOVE: The Lippisch Delta IVc was tested by Heini Dittmar at Darmstadt-Griesheim between January 1937 and April 1939. It was powered by a 75 hp Pobjoy engine and had a fixed undercarriage. Also known as the DFS 39, it was transferred to the Messerschmitt plant at Augsburg where it continued flying until August 1941.



ABOVE: A remarkably aerodynamic design for its time, the DFS 40 was unpowered, but carried out many tests connected with the development of the Me 163.

BELOW: The DFS 194 was the first of the Lippisch tailless designs to be fitted with a rocket engine and was the direct predecessor of the Me 163. Flight testing began at the end of July 1939, with the first rocket-propelled test being made with Heini Dittmar at the controls on 3 June 1940.



The Advent of the Turbojet 1935-1941

"Because Professor Dr. Ernst Heinkel undertook the development of the He 178 and its engine at his own expense and without there being general knowledge of the event, the first flight occurred in the presence of few people: e.g. Professor Heinkel, the constructors, statisticians, aero-dynamicists, mechanics and, of course, Dr. von Ohain and his close team of engineers. After the first successful test flight, Heinkel reported to the RLM, and consequently no more flights were made until the aircraft could be made ready for inspection by Göring and the General Staff."

Erich Warsitz on the first flight of the He 178, 27 August 1939

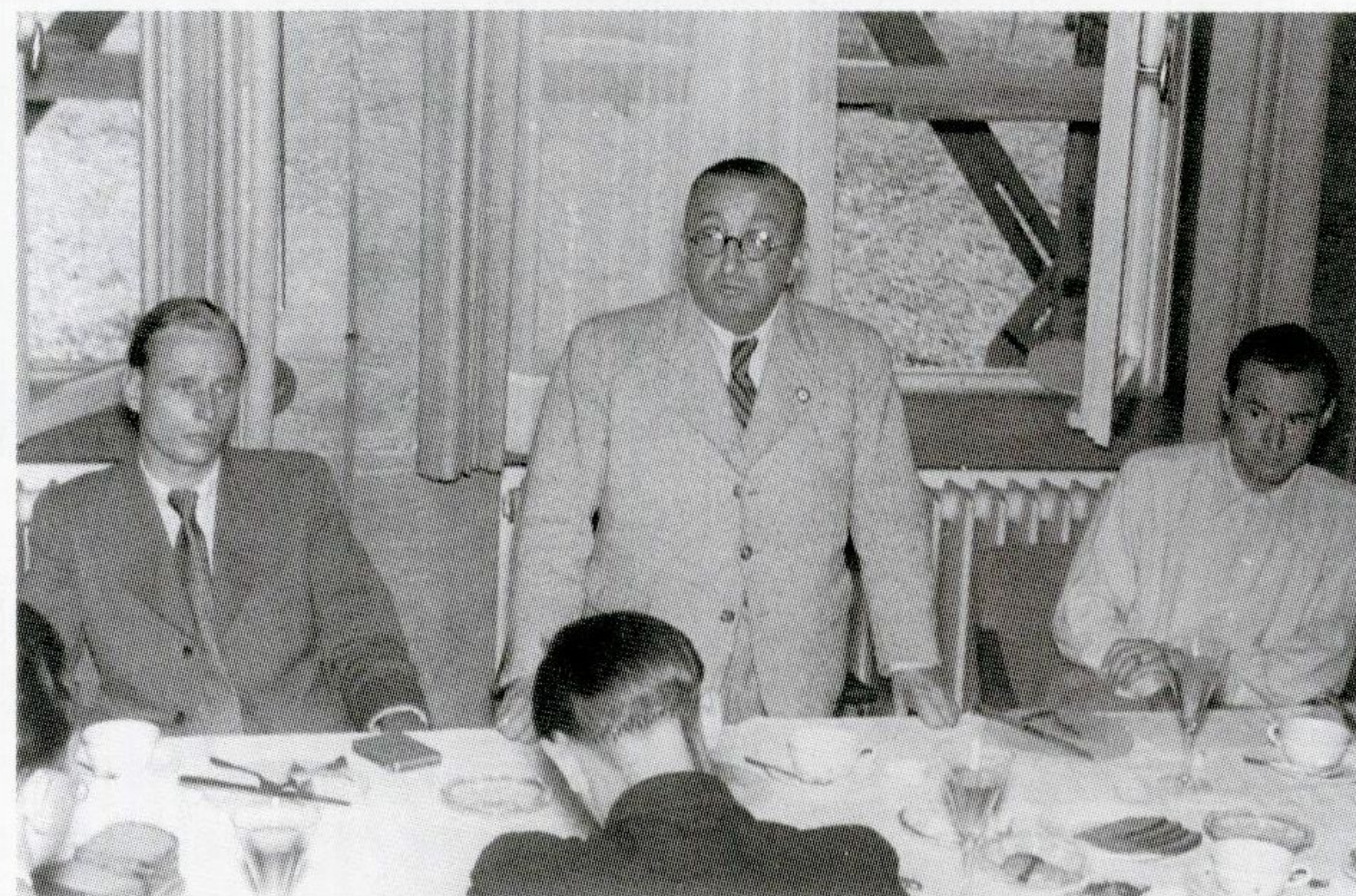
The first practical design for a turbojet engine in Germany was produced by a 24-year-old graduate of Göttingen University, Dr. Hans-Joachim Pabst von Ohain in 1935. Von Ohain took his design to a skilled automotive engineer, Max Hahn who built a first demonstration engine. A patent for this engine was granted on 9 November 1935. At this time the engine comprised a two stage compressor (an axial fan stage followed by a centrifugal second stage), an annular combustion chamber and a radial turbine.

Although showing promise, this first 'garage engine' obviously required much further development, the cost of which was way beyond the von Ohain's budget. As he explained:

"These tests suggested to me that fundamental combustor investigations and systematic developments were necessary that would require time and money exceeding my private means. My Professor at Göttingen, Robert Pohl, came to my rescue. In a very cordial discussion, he declared that he was convinced of the great future potential of jet propulsion. He suggested that industrial support would be necessary, and said that he was willing to give me a letter of recommendation to any company of my choice. Intuitively, I thought the engine industry would be negative toward gas turbine development; and therefore I suggested the Heinkel corporation."

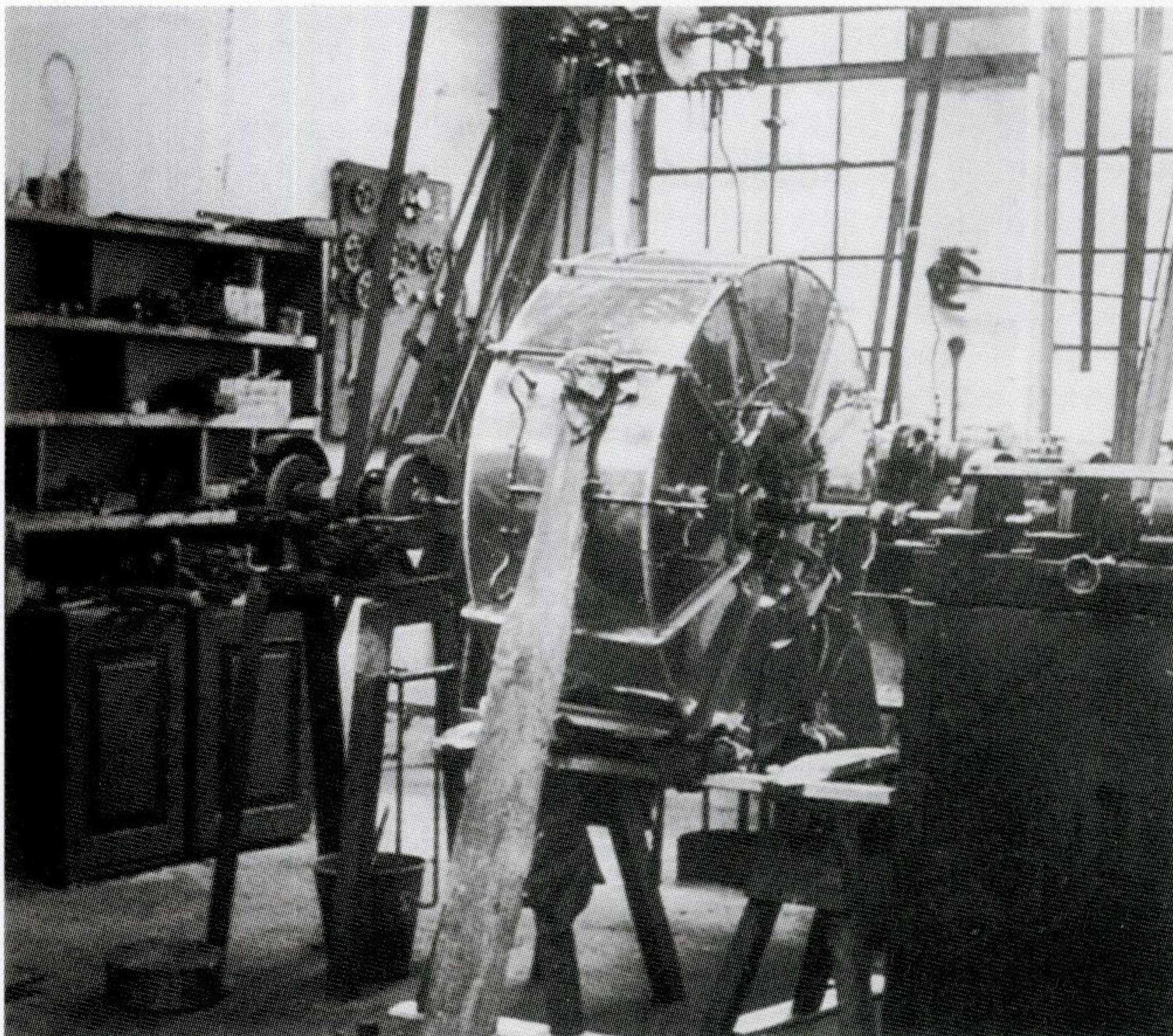
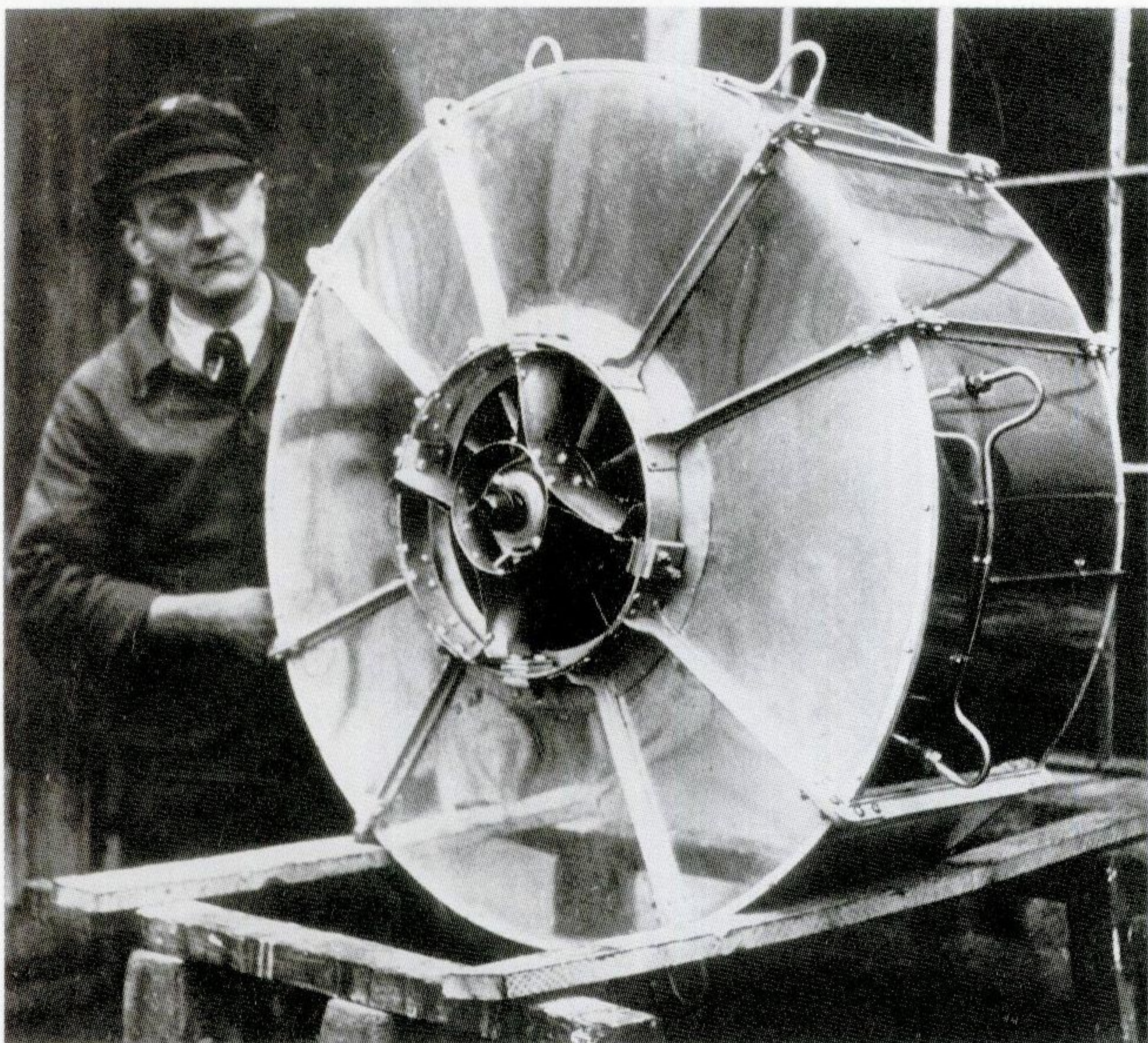
Von Ohain began working for Heinkel on 15 April 1936, taking Max Hahn with him. Shortly afterwards he was joined by *Dipl.-Ing.* Wilhelm Gundermann, a specialist in aircraft engineering and turbo-machinery, and by the summer of the year he had between six and eight fitters and mechanics assigned to his workshop. Von Ohain again:

"During 1936 we made only slow progress in the combustion chamber programme because the highest priority was placed upon the design and construction of the hydrogen-powered demonstration engine, the

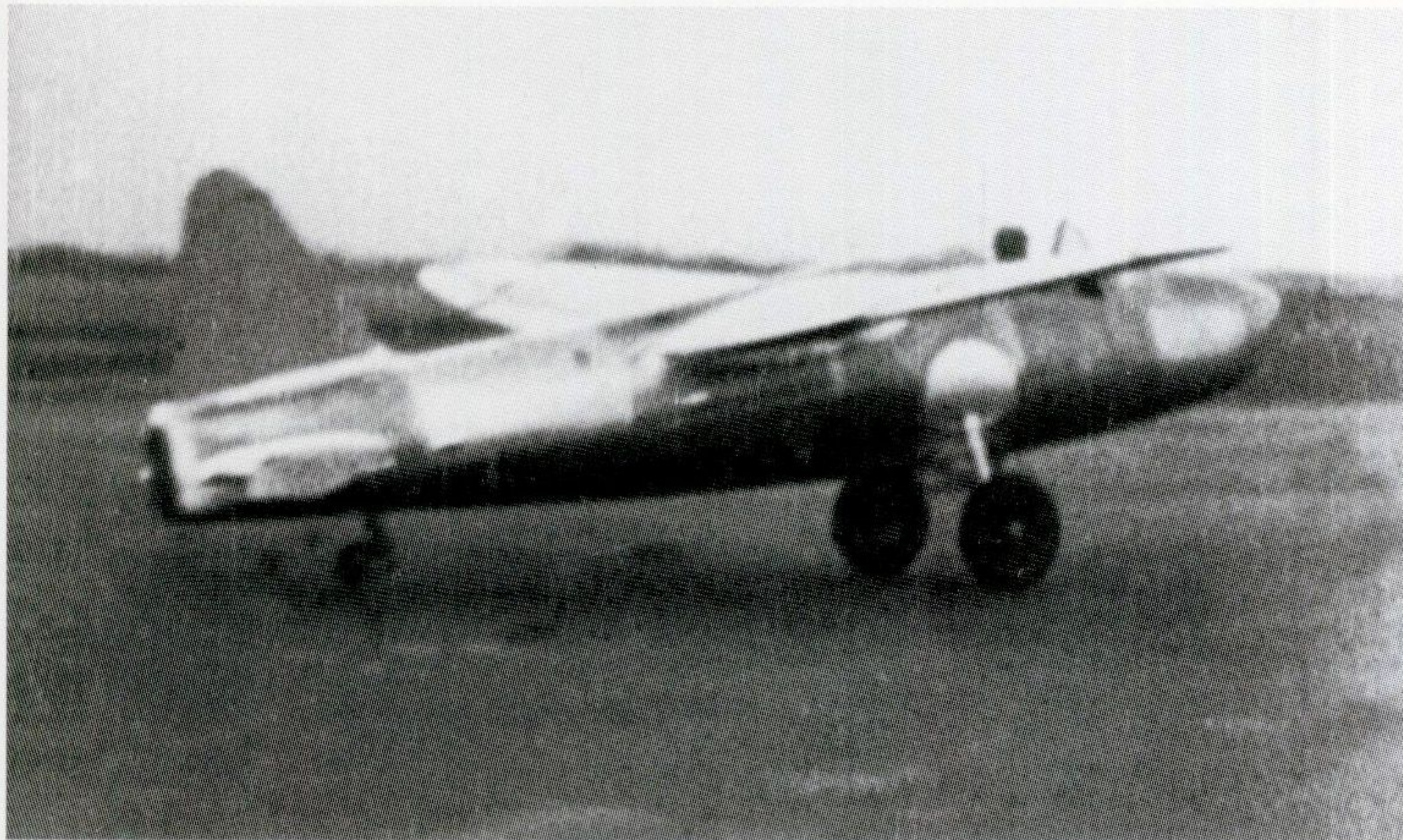


ABOVE: Taken at the party following the first test flight of the He 178 V1 in August 1939, this photograph shows the three men most responsible for the world's first turbojet flight. From left to right are Erich Warsitz, the test pilot, Ernst Heinkel who provided the finance and backing, and Hans von Ohain who designed the aircraft's engine.

BELOW: Max Hahn with Hans-Joachim Pabst von Ohain's first turbojet engine in the garage of the Bartels and Becker company at Göttingen in 1935. The potential of this engine led von Ohain to approach Ernst Heinkel who enthusiastically supported his work.



LEFT: Von Ohain's 'garage engine' showing the rather primitive conditions in which it was developed. This first turbojet cost less than 1,000 Reichsmarks to build.



ABOVE: The He 178 V1 completed the world's first turbojet flight on 27 August 1939. According to its pilot, Erich Warsitz, the aircraft completed about twelve test flights before development switched to the twin-engined He 280. The aircraft was powered by a 500 kg (1,100 lbs) thrust HeS 3b engine.



ABOVE: A second prototype of the He 178 was built with an enlarged wing and a fully retractable undercarriage. It was to be powered by the improved HeS 6 engine which was designed to produce 550 kg (1,200 lbs) thrust, but it never flew.

HeS 1. This was completed and installed in a test rig around the end of February 1937... By April most of our test runs had been completed. We were delighted that the apparatus fully met our expectations. It reached the anticipated performance, it handled very well in acceleration and deceleration, but most of all the psychological effect was enormous. Heinkel and his engineers suddenly believed firmly in the feasibility of turbojet propulsion."

The successful testing of the HeS 1 led Heinkel, a shrewd businessman, to accelerate development of this form of propulsion, at the same time withholding details of it from the RLM. Work began immediately on an engine which was designed to use liquid fuel and produce a static thrust of about 800 kg (1,760 lbs). The first prototype of this engine, the HeS 3, was bench run in March 1938, but problems were experienced with the new compressor, necessitating a redesign, the HeS 3b.

The new engine was then tested beneath the He 118 V2 while work was undertaken on the design of a purpose-built aircraft, the He 178. Two prototypes of this small, shoulder wing monoplane were to be built. The first had a fixed undercarriage, the second a retractable unit and an enlarged wing. After considerable development, the HeS 3b, which then developed almost 450 kg (990 lbs) thrust, was fitted to the He 178 V1. This aircraft, piloted by *Flugkapitän* Erich Warsitz, flew for the first time on 27 August 1939 – the world's first turbojet powered flight. Further development of the Heinkel engine led to the HeS 8 (which later received the RLM designation 109-001) that was used to power the world's first jet fighter, the He 280.



LEFT: The He 280 was the world's first jet fighter, but was never flown operationally. Here the V3 taxis past the camera with Heinkel test pilot Fritz Schäfer in the cockpit. Standing on the wing (with the trilby hat) is Hans Martin Antz, with Hans von Ohain leaning on pilot's seat and another Heinkel test pilot, Gotthold Peter, to his right.

Meanwhile, an official programme for development of turbojet propulsion was put in place, largely due to the efforts of *Dipl.-Ing.* Helmut Schelp. In September 1938, Schelp had transferred to the RLM department responsible for aircraft engine development where he hoped his ideas for gas turbine engines would gain support. He soon found an ally in *Dipl.-Ing.* Hans Mauch, the Technical Advisor for Special Power Plants who, up to that time, had been interested primarily in rocket engines. Accordingly, in the autumn of 1938, they visited the main aircraft engine manufacturers, with the result that Bramo and Jumo (the Junkers Engine Company) began design work on turbojets.

At Jumo, the head of the company, *Prof.* Otto Mader, appointed a 38-year old graduate of Graz Technical High School in Austria, Anselm Franz, to undertake a general survey of all gas turbine possibilities. Following detailed weight estimates of piston engines arranged to drive turbines, Franz concluded that there would be great difficulty in getting the required performance from such systems within any reasonable weight limits. He felt that only a simple turbojet would be light enough for aircraft use. Franz later recalled:

"In 1939 the RLM wanted us to take over Wagner's engine [developed by the Junkers Aircraft Company], but I refused and during the autumn of that year we received a government contract for our own T 1, later to become known as the Jumo 004 A. This can claim to be the world's first successful axial flow turbojet, a configuration that became the standard for jet engine design. The Jumo 004 was also the first jet engine in volume production and combat service."

In July 1939, Junkers received an official development contract for the engine, the 109-004. The requirement was for it to deliver 600 kg (1,320 lbs) thrust at 900 km/h (559 mph) at sea level. It was designed to be brought into production and operation as quickly as possible, and was developed from the outset to burn diesel oil.

In the same month that it merged with BMW, Bramo was working on two turbojets which were given the BMW project designations P.3302 and P.3304. The P.3302 was initially considered as a research unit to assist in the development of the tiny axial-flow P.3304 (109-002) with a counter-rotating compressor. With a diameter of only 610 mm (24 inches) and an estimated thrust of 600 kg (1,320 lbs) the P.3304 eventually proved too complicated and was abandoned. This meant that BMW could now concentrate on the simpler P.3302 (109-003), (J-W 5-4 022) the prototype of which first ran in December 1940. Initial tests were very disappointing and forced a complete redesign to be undertaken during the spring of 1941 under the designation P.3302 V2 to V10. Even these designs proved unsatisfactory and resulted in yet a further reworking of the engine under the designation P.3302 V11-V14. By the autumn of 1942, this later sub-type was producing a thrust of about 550 kg (1,210 lbs) and was test flown beneath a Bf 110 flying test bed.

As turbojet engine development proceeded, a corresponding programme for high-speed airframes was being formulated by *Dipl.-Ing.* Hans Martin Antz of Department LC 7 (Airframe Development) of the RLM. Antz soon formed a close working relationship with Schelp, who supplied the basic data for jet engines, and, as far as possible, the two development programmes were integrated. Antz was then 29 years old and his academic background bore many similarities to that of Schelp.

In October 1938, following discussions with Antz, *Prof.* Messerschmitt authorised

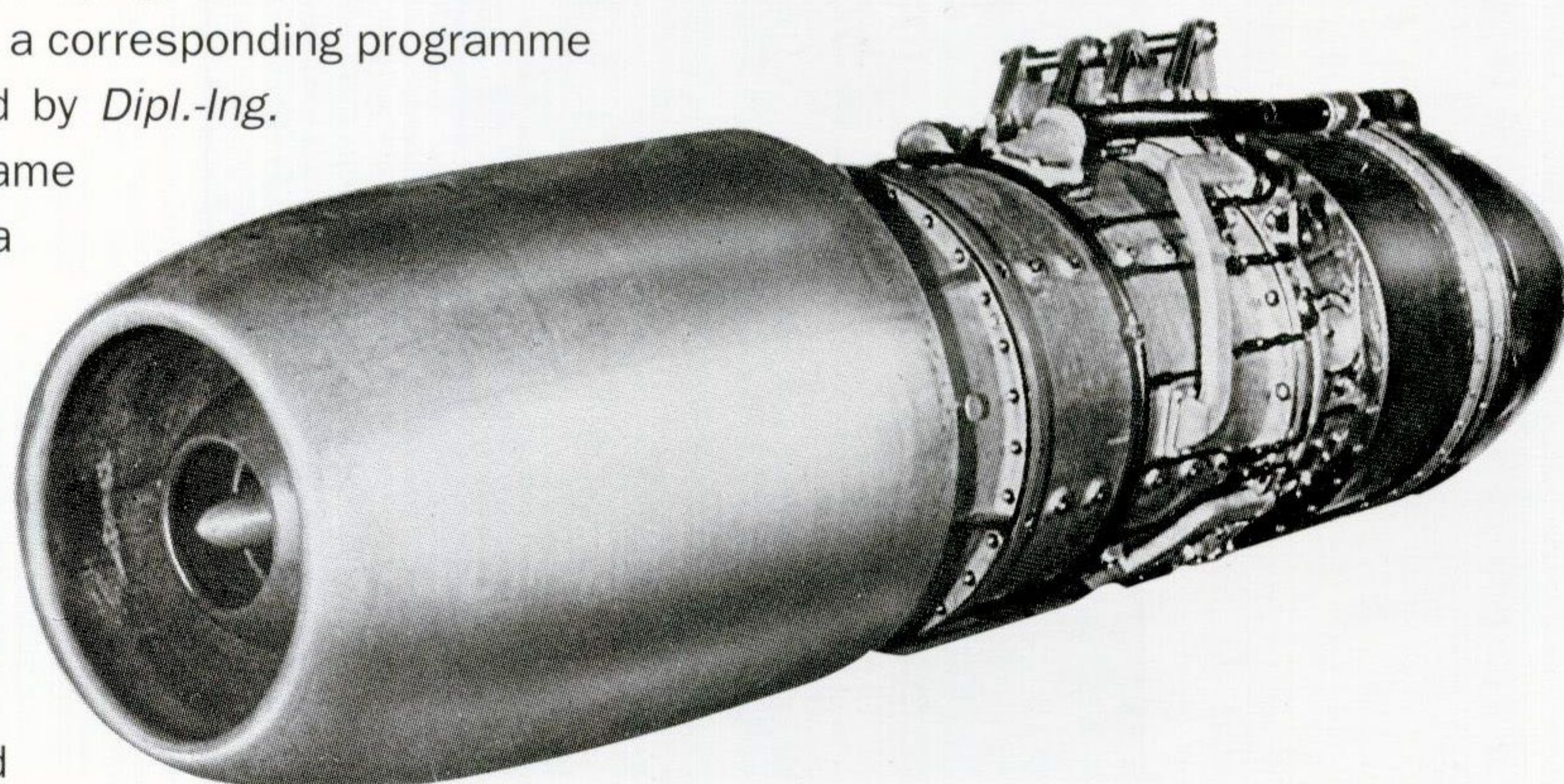


LEFT: Professor Otto Mader was the head of the Junkers Engine Company, but he was not particularly enthusiastic about the development of the turbojet. Nevertheless he was responsible for the appointment of Anselm Franz who later designed the Jumo 004 engine which powered the Me 262.



ABOVE: A group of personalities watch a test flight of the Me 262 V6 at Lechfeld on 2 November 1943. From left to right are; an unknown Luftwaffe officer, Messerschmitt test pilot Fritz Wendel, Hermann Göring, Willi Messerschmitt and Anselm Franz. Although provided with only a small number of engineers, Franz's team began the design of the Jumo T1 in December 1939. This engine, under the RLM designation 109-004 A, was later used to power both the Me 262 and Ar 234 jet aircraft.

BELOW: After the failure of the original BMW P.3302 V1-V10 series, the company undertook a major redesign of the engine under the designation BMW P.3302 V11-V14. Two of these units were fitted to the Me 262 V1 but they both suffered turbine blade failures during an attempted flight on 25 March 1942. This delayed the programme by several months and resulted in another major redesign.



Robert Lusser, his *Projektbüro* head, to undertake feasibility studies for a single-seat fighter with turbojet propulsion. By the end of December 1938 Messerschmitt had received an official study contract from the RLM, with more detailed requirements being outlined on 4 January 1939. Design work then began under Woldemar Voigt, head of Messerschmitt's Project Office, the type receiving the designation P.1065. The team's brief was extremely nebulous. All they had to work from was an approximation of the engine's size and weight. From this they attempted to produce an aircraft that would have an endurance of 30 minutes and a speed of 850 km/h (528 mph). Voigt remembered:

"Since both the engine weight formula and manufacturing considerations seemed to favour smaller engines, we suggested to the RLM that the proposed fighter should have two turbojets of about 315 kg (690 lbs) thrust each... The first twin-engined configuration examined was basically a straightforward low-wing aeroplane with the engine nacelles mounted centrally in the wings."

Following these studies, detailed work on the design began on 1 April 1939. The first proposal, which was submitted to the RLM on 7 June 1939, had a wing virtually identical in planform to that of the early Bf 109 and Bf 110. After examining the proposal, the RLM gave permission for construction of a mock-up. Various armament combinations were proposed, and at the same time it was also planned to increase its wing area by fitting a parallel section to each tip. Initially two engine layouts were proposed; either two BMW P.3302 engines (to become known as the BMW 003) slung beneath the wings, or two of the slimmer BMW P.3304s mounted centrally. By November 1939, a third type of engine had also entered the picture when details of the Junkers T 1 (Jumo 004 A) became available.

On 19 December 1939 a mock-up of the P.1065 was inspected by representatives of the RLM. By early February 1940 a description of the layout proposed for the first prototype was issued. Two BMW P.3302 engines were to be mounted below the wings, the leading edges of the outer sections of which were now to be swept back some 18 degrees for centre of gravity reasons. On 18 April 1941, the first flight of the Me 262 (as the P.1065 had just been redesignated) took place, with the aircraft powered by a single Jumo 210 piston engine because of delays with turbojet development.

It was not until 25 March 1942 that the prototype attempted to make its first flight with a pair of BMW P.3302 V2/V10 engines, but the Jumo 210 piston engine was retained as a safety measure. This was to prove a fortunate precaution as both turbojets suffered compressor blade failures just after leaving the ground but, with the Jumo 210 piston engine, the test pilot, Fritz Wendel, managed to land it safely.

Nearly four months later, on 18 July 1942, the third Me 262 was fitted with a pair of Jumo 004 engines and successfully completed the type's first jet-powered flights. Early tests with the Me 262 were to prove the airframe excellent, the only modification being to increase the wing root chord by continuing the swept leading edge of the outer panels to the centre section.

Considerable development work on the Me 262 then followed, the major improvements being the replacement of the tailwheel by a tricycle undercarriage and the upgrading of its armament to four 30 mm MK 108 cannon. The aircraft's introduction into operational service was considerably delayed, however, both by problems with its engines and by political arguments. Chief amongst the latter was Hitler's insistence that the aircraft be used as a fast *bomber* rather than a fighter for which it had been designed. The logic of this argument was that the aircraft should be used to hurl bombs at the invasion force anticipated to land in northern France and thus help drive them back into the sea. Whatever the merits of this idea, it should have been dropped immediately the Allies gained a first foothold in Western Europe, but it was not until 22 March 1945 that Hitler finally reversed his decision. By then it was too late.

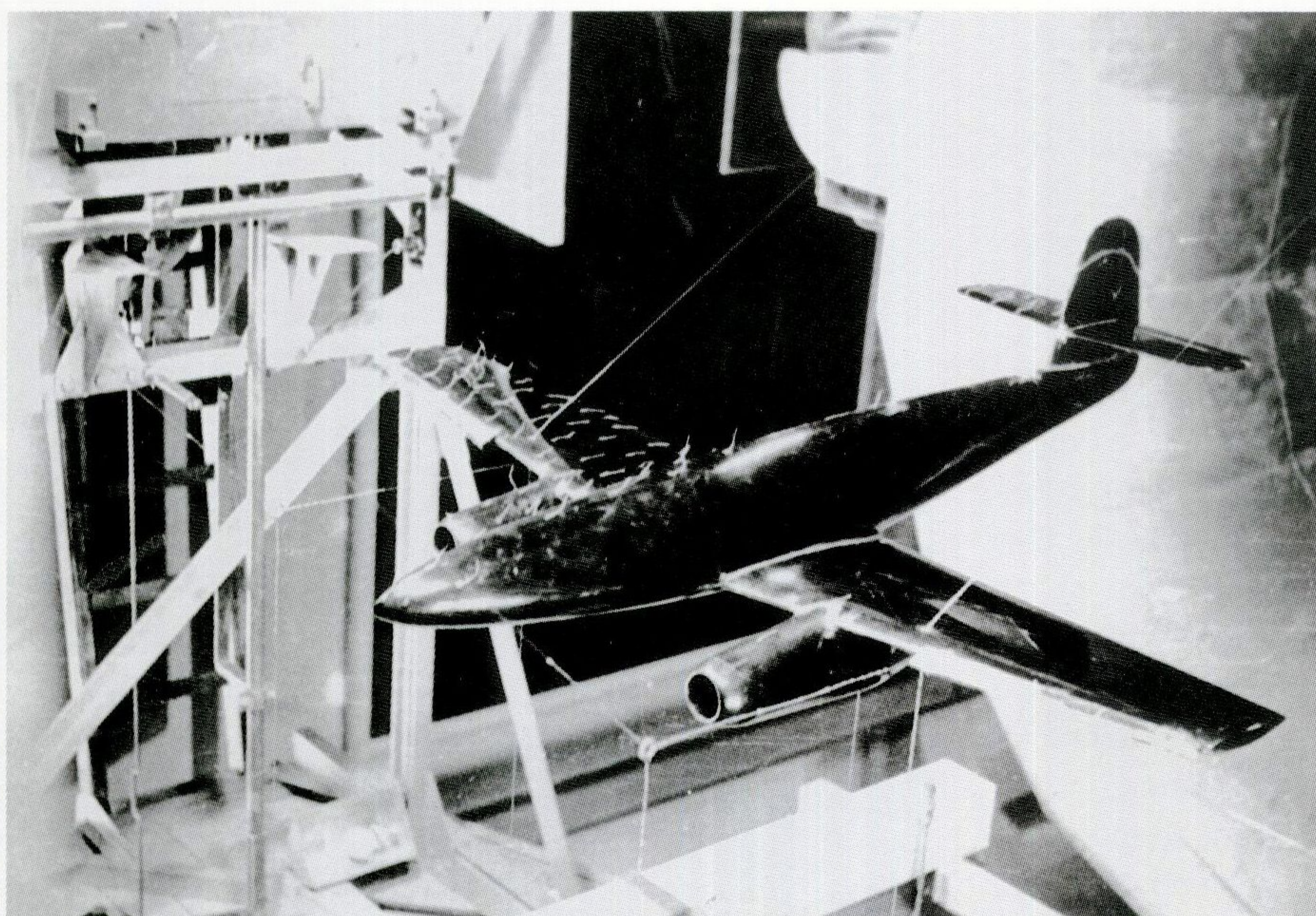


ABOVE: In the foreground, from left to right are General Gottfried Reidenbach, head of aircraft development at the RLM, Hans Martin Antz of Department LC 7 (responsible for airframes) and Karl Schwärzler of Heinkel's technical department. In the background, mechanics are working on the He 280 V2.



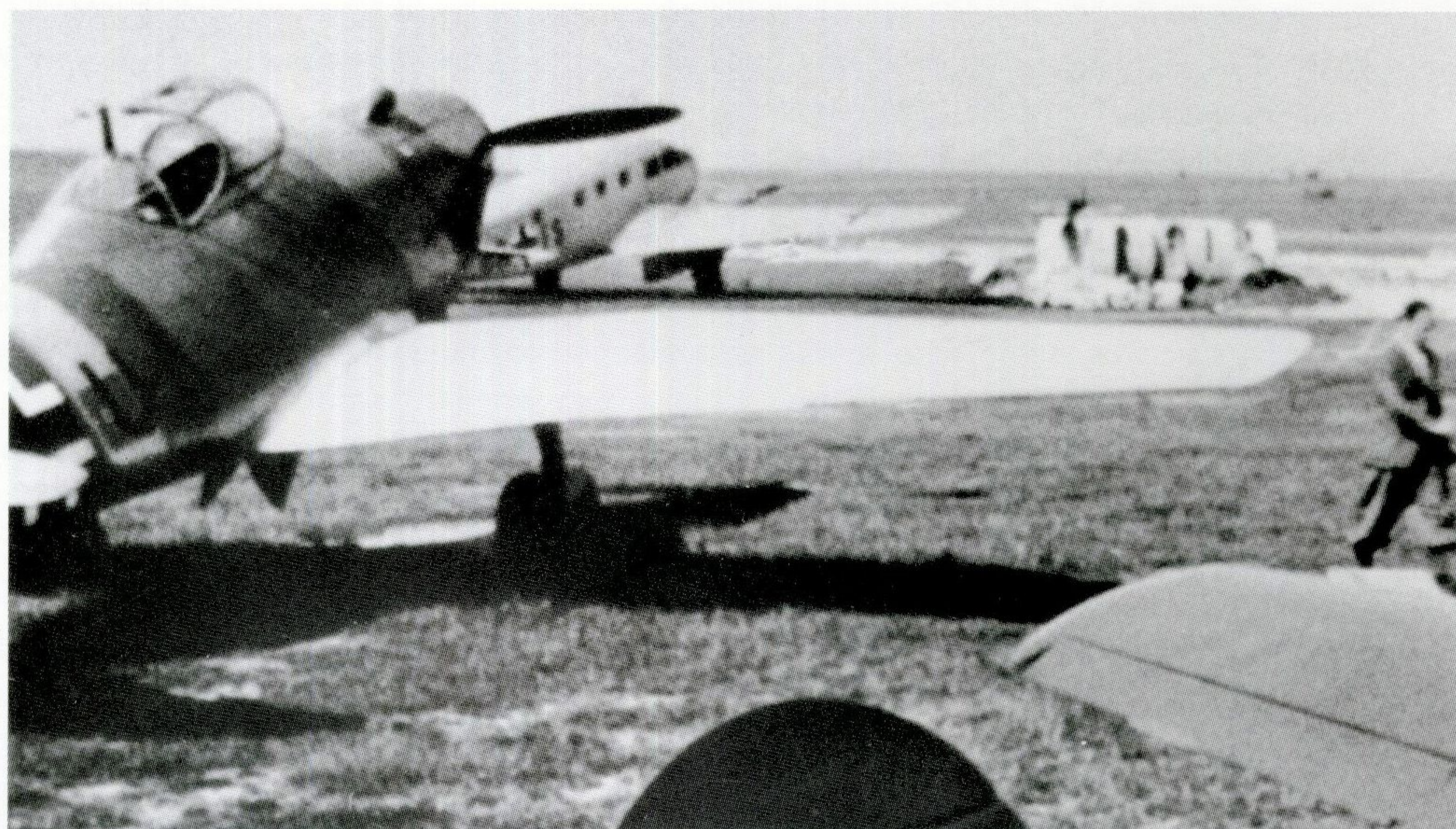
ABOVE: Dipl.-Ing. Woldemar Voigt joined the BFW (later Messerschmitt) Design Bureau in 1933, becoming head of the Project Office in 1939. He was largely responsible for developing the Me 262.

1944-1945

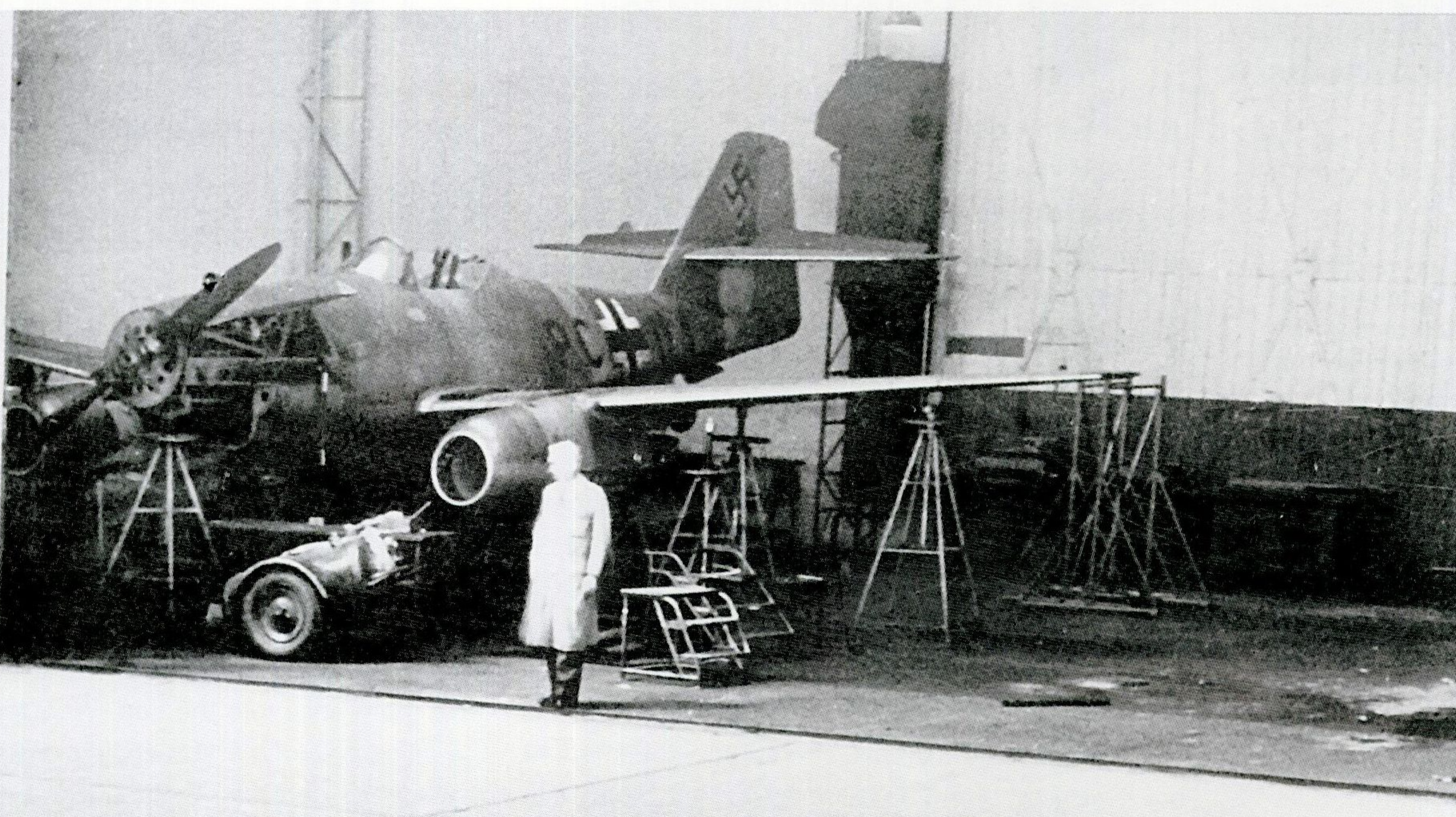


LEFT: This wind tunnel model of the early P.1065 gives an excellent impression of the original design concept with straight wings similar to those of the early Bf 109 and underslung turbojets.

BELOW: Because of the delay in producing turbojet engines of sufficient reliability, the first prototype of the Me 262, the V1, was fitted with a single 700 hp Jumo 210 G piston engine in the nose in order to test the airframe's flight characteristics. It flew for the first time with this engine at 13:40 hrs on 18 April 1941. With Fritz Wendel at the controls, the aircraft became airborne after a 600 to 700 metre run, but the engine immediately overheated.



BELOW: During the early spring of 1942 the Me 262 V1 was fitted with a pair of BMW P3302 V11-V14 engines, but these failed during the first attempted flight on 25 March. Wendel had to land the aircraft on the power of the Jumo 210 only. The BMW's were removed and the aircraft eventually re-engined with two Jumo 004 turbojets.





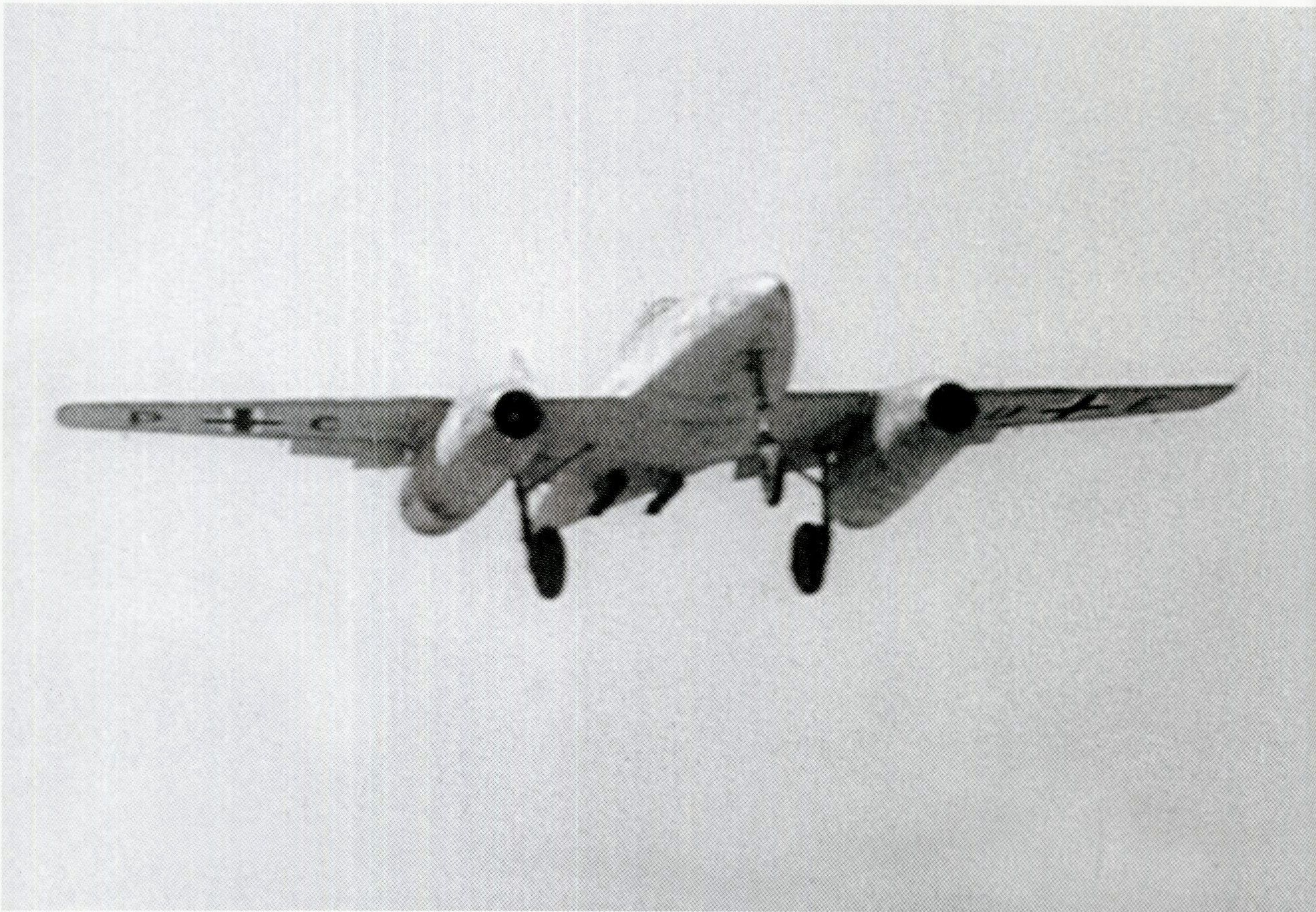
ABOVE: A group of Messerschmitt personnel gather around the Me 262 V3 prior to its first flight on 18 July 1942. Fitted with a pair of Jumo T1 engines, the V8 and V9, the aircraft made its first successful flight at 08.40 hrs with Flugkapitän Fritz Wendel in the pilot's seat. A second flight was carried out at 12:05 hrs and lasted 13 minutes. On take-off Wendel found it necessary to apply the brakes in order to bring the tail up, after which rudder response was good.



RIGHT: Fritz Wendel leans nonchalantly on the rear fuselage of the Me 262 V3 in July 1942. He played an important role in the early testing of the aircraft before heading a trouble-shooting team to introduce the revolutionary aircraft to operational service.

RIGHT: Because of the difficulties associated with the tailwheel undercarriage, the Me 262 V5 was fitted with a fixed tricycle unit which proved much more satisfactory. The aircraft made its first flight on 6 June 1943.

BELOW: The success of the tricycle undercarriage arrangement fitted to the Me 262 V5 led to the next prototype, the V6, being fitted with a retractable unit. This was adopted, with slight modifications, by all subsequent aircraft. This photograph was taken on 2 November 1943 at Lechfeld when the aircraft was demonstrated to Göring and other high ranking Luftwaffe officials.



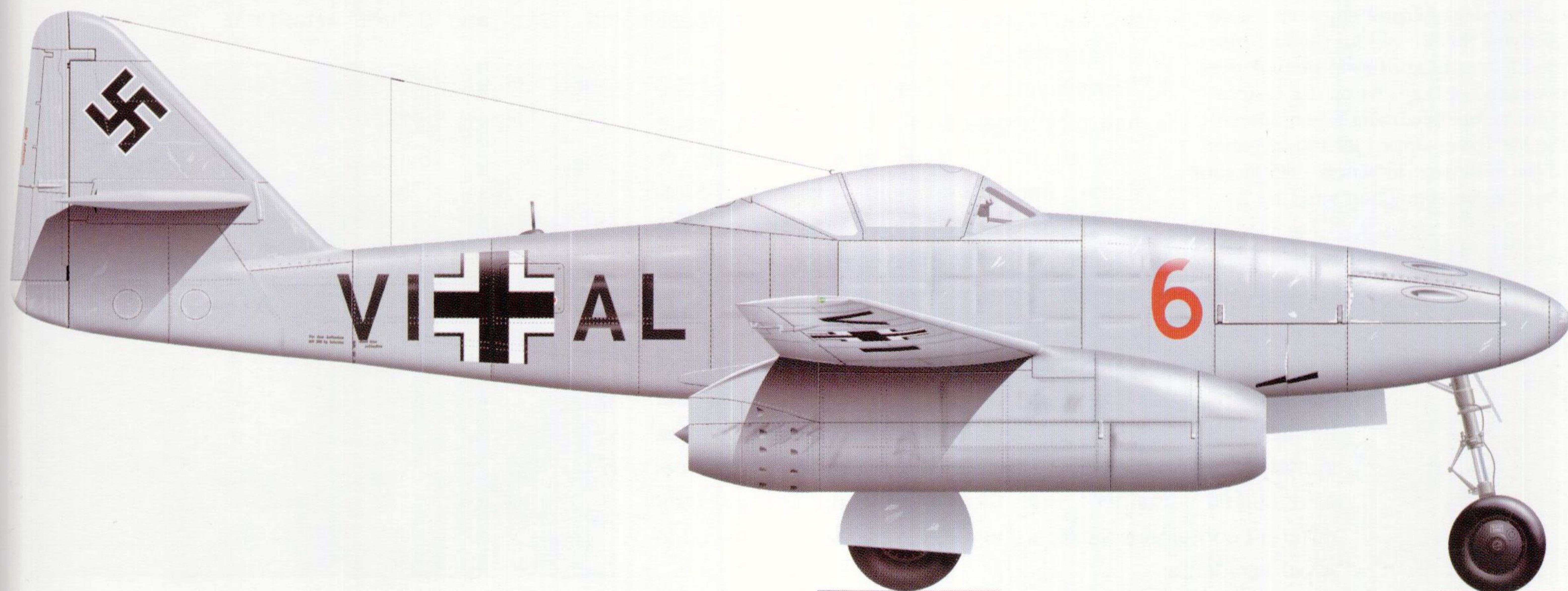
1944-1945



ABOVE: Early tests with the Me 262 were not without mishap, both engines and undercarriage proving to be rather unreliable. This photograph, of the seventh production aircraft, the S7, (W.Nr. 130012) was taken on 1 June 1944 following a crash caused by an engine fire. The colouring and markings are very similar to those on the aircraft flown by Thierfelder.

Messerschmitt Me 262 S7 (W.Nr. 130012), June 1944

This Me 262 first flew in April 1944 and was painted pale blue (RLM 76) overall with the black four-letter call sign VI+AL. The nose, wings and both engines were damaged on 1 June 1944 due to an engine fire. Although the seventh production aircraft, the S7 bore the series test number '6' in red on its nose. This was because the sixth aircraft was delivered direct to Erprobungskommando 262.



The *Erprobungskommando* 1942-1944

"Suddenly I was startled by an ear-splitting roar. It sounded as though an immense hot iron had been plunged into a huge bathtub – a veritable hiss of Siegfried's dragon! My head spun around and my surprised eyes saw a violet-black cloud driving a leaping, skipping 'something' ahead of it, faster and faster until the object leaped from the ground, jettisoned a pair of wheels, and shot up into the sky. By the time I had closed my mouth, which had opened in astonishment, the thing had disappeared."

Lt. Hermann 'Mano' Ziegler on joining Erprobungskommando 16, August 1943

On 20 April 1942 a special unit was established to develop the Me 163, the *Komet* as it was named, under operational conditions using the Messerschmitt plant at Augsburg for instruction and development and the *Luftwaffe* airfield at Peenemünde-West for flight testing. Designated *Erprobungskommando (EKdo) 16*, the unit was led by *Hptm.* Wolfgang Späte, an experienced pre-war glider pilot who had earlier commanded 5./JG 54. Späte made his first unpowered flight in the

Me 163 A V4 on 8 May, receiving instruction from Heini Dittmar who had also been transferred to the unit. Three days later Späte made his first powered flight in the V4, but he experienced problems with the unsprung two-wheeled take-off dolly. It was found that the aircraft would frequently bounce into the air at high taxiing speeds which could cause often severe spinal injuries to the pilot. Given the volatility of the rocket fuels, this would become an even more serious problem as regular powered flights increased. The difficulties were such that Späte considered it essential that a sprung dolly be developed before regular operational training could begin.

By early May the ground crews for the unit had assembled at the *Kommando's* twin airfields where they received four week's instruction on the rocket fighter. At this time flying was carried out by Dittmar, Späte and *Lt.* Rudolf 'Rudi' Opitz sometimes joined by the famous woman test pilot, Hanna Reitsch, but on 26 May two others, *Oblt.* Joachim 'Joschi' Pöhs and *Oblt.* Johannes Kiel (J-W 5-4 036), arrived at Augsburg to join the unit. After their arrival the new pilots familiarised themselves in the two-seat DFS *Kranich* and *Granau Baby* sailplanes before moving up to the *Habicht* aerobatic glider, some of which had clipped wings. The newcomer would then undertake his first unpowered flights in an Me 163 A, towed into the air by a Bf 110 twin-engined fighter, before finally being allowed to make a 'sharp start' under rocket power.

On 26 June the first B-series prototype, the Me 163 B V1, was flown for the first time at Lechfeld, the variant having a much plumper fuselage and being powered by the Walter 109-509 B 'hot' rocket engine. Many problems were associated with the two fuel components by this engine, designated *T-Stoff* and *C-Stoff*. A favourite demonstration to new members of the *Kommando* was to drop a tiny amount of one fuel into a saucer of the other. The result was an instant hiss, bang and sheet of flame. Another problem was that *T-Stoff* (an 80 per cent hydrogen peroxide solution

with oxyquinoline or phosphate as stabiliser) caught fire on contact with any organic substance, not least of which was human flesh, forcing the pilots to wear special, allegedly acid-proof suits, gloves and boots. *T-Stoff* also had to be stored in aluminium containers, because this fuel could quickly eat through steel. *C-Stoff* (a 30 per cent hydrazine hydrate solution in methanol), on the other hand, could only be kept in enamel or anodised containers. Both fuels were colourless and their different containers were carefully colour-coded and labelled to avoid accidents.

BELOW: *Lt.* Paul Rudolf 'Rudi' Opitz, right, with *Lt.* Hermann 'Mano' Ziegler, the Technical Officer of *Erprobungskommando 16*. Opitz was attached to the Experimental Station at Peenemünde-West before being transferred to *Erprobungskommando 16* in August 1943. He made many important test flights in the Me 163 before being appointed *Kapitän* of 1./JG 400 in May 1944. He emigrated to the USA after the end of the war.



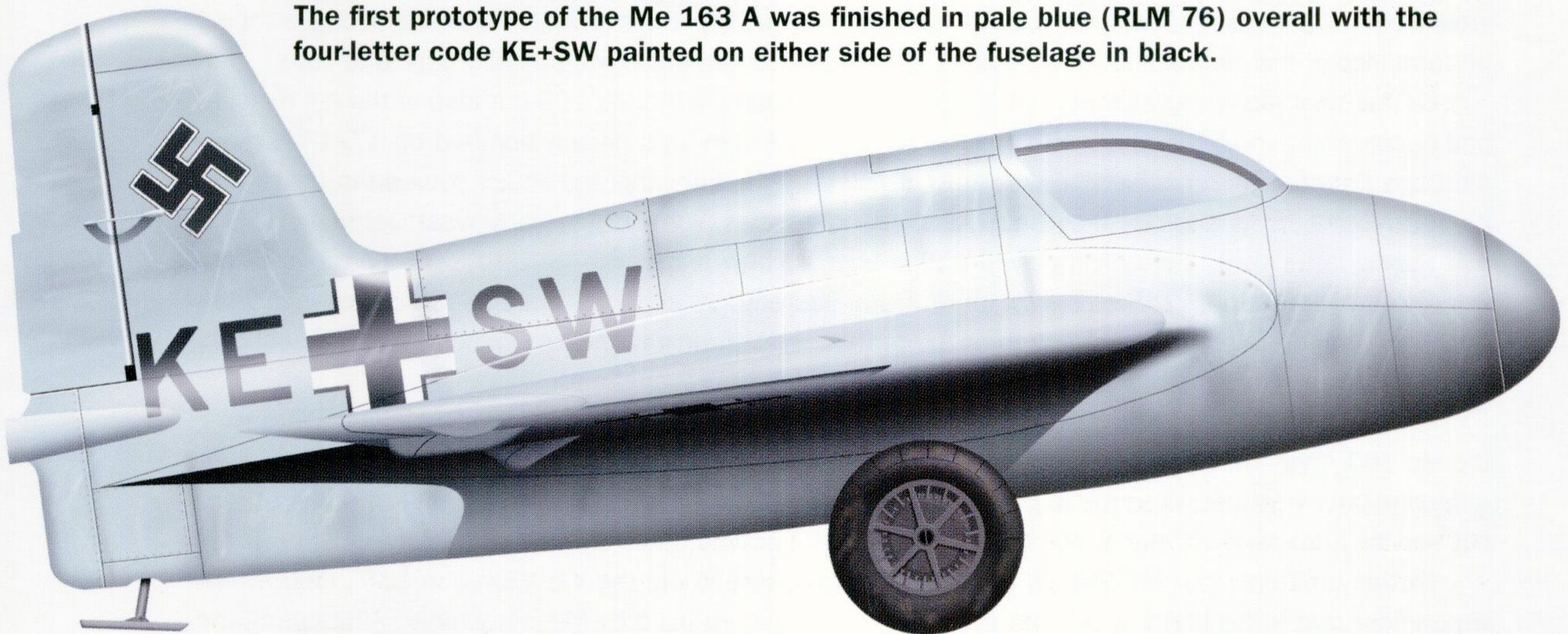
ABOVE: Wolfgang Späte was born on 8 September 1911 in Dresden, and prior to the Second World War achieved fame as one of Germany's most accomplished glider pilots. After serving as a reconnaissance pilot, he joined 5./JG 54 on 1 January 1941, becoming *Staffelkapitän* during the autumn. In April 1942, Späte was appointed commander of *Erprobungskommando 16*, flying the Me 163 for the first time a month later. In April 1944 he took over command of IV./JG 54 on the Eastern Front before becoming *Kommodore* of the Me 163-equipped JG 400 in August of the same year. In March 1945 he took over the Me 262 fighter wing, JG 7.



1944-1945

Messerschmitt Me 163 A V4 (W.Nr. 163 00 00 001) of Erprobungskommando 16 at Peenemünde-West, August 1941

The first prototype of the Me 163 A was finished in pale blue (RLM 76) overall with the four-letter code KE+SW painted on either side of the fuselage in black.



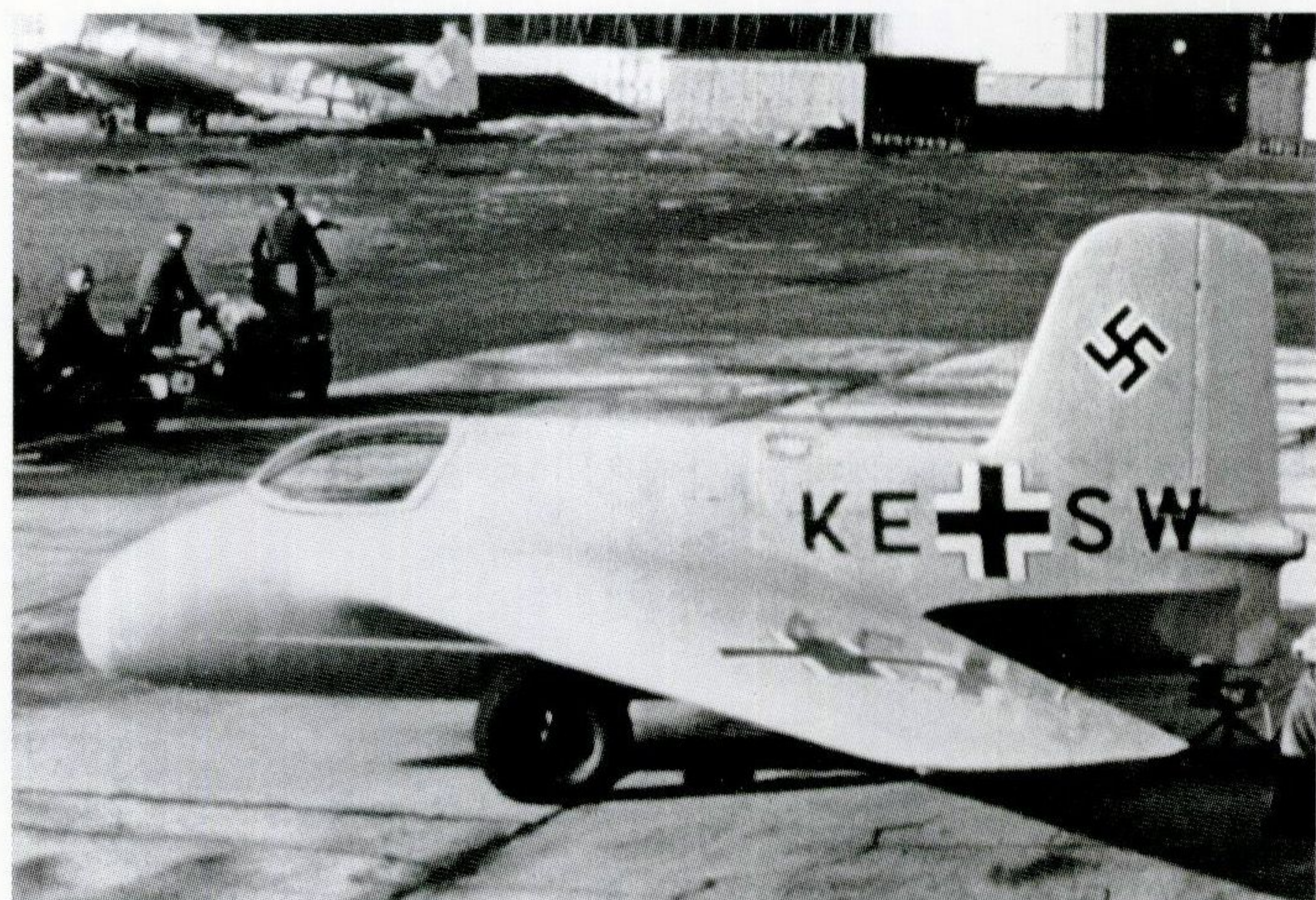
By November, *Erprobungskommando 16* had several Me 163 As in its inventory plus five Bs (the V1 to V5) although the latter had been damaged while being flown by Hanna Reitsch on 30 October. Just prior to this, on 16 October, Heini Dittmar had been injured in a hard landing with the Me 163 A V12, Rudi Opitz taking over responsibility for flight testing. Further development tests continued during the winter months of 1942/43, although bad weather often hampered the work of the unit.

In February 1943 the *Kommando* was ordered to take on the testing of the experimental jet fighters, the He 280 and Me 262. However, when *Hptm.* Späte and *Oblt.* Pöhs arrived at the Heinkel factory at Rostock, they discovered that the He 280 V1 had been destroyed, the V2 was being re-engined with the Jumo 004 and the V3 had been damaged in an emergency landing.

As for the Me 262, only the V2 was flying, and Späte was forced to report that neither type was ready for flight tests by his *Kommando*.

Two months later, on 17 April, Späte *did* fly the Me 262 V2, reporting to the *General der Jagdflieger*, Adolf Galland that: "The climbing speed of the Me 262 surpasses that of the Bf 109 G by 5 to 6 m/sec (16 to 20 ft/sec) at a much better speed (420 km/h or 261 mph). The superior horizontal and climbing speeds will enable the aircraft to operate successfully against numerically superior enemy fighters... The aircraft deserves the highest attention; its development should receive the greatest possible support. High speeds can be obtained by jet propulsion. The Me 262 is only a first step...."

Meanwhile development of the *Komet* continued, *Oblt.* Pöhs testing FuG 25a IFF radio equipment and *Lt.* Opitz rocket assisted take-off units during April. At the end of that month, two further pilots joined the *Kommando*, *Oblt.* Anton 'Toni' Thaler and *Lt.* Herbert Langer. By August, development of the



ABOVE: The prototype of the Me 163 A, the V4, made its first powered flight on 13 August 1941 at Peenemünde with Heini Dittmar at the controls. The prototype designations V1 to V3 were probably used by the *Komet*'s predecessor, the DFS 194.



LEFT: A group of six of the most important Me 163 pilots. From left to right are: Flugkapitän Helmut Kaden, responsible for Me 163 acceptance testing, *Oblt.* Johannes Kiel who had claimed 26 victories with I./ZG 2 and I./ZG 26 before joining *Erprobungskommando 16*, Wolfgang Späte, Heini Dittmar, 'Rudi' Opitz, and Josef Pöhs who had previously served with 5./JG 54. Kiel took over command of 7./ZG 26 in August 1943 and became Kommandeur of III./ZG 76 in November, but was killed in combat on 29 January 1944. Pöhs lost his life a little earlier, on 30 December 1943, while testing the Me 163.

rocket fighter had developed sufficiently to allow some of the *Kommando* to concentrate on developing ground-control procedures. Some difficulties were experienced with the high speed and exceptional climbing performance of the aircraft and with the radio control procedures which were initially unable to cope.

By this time rocket development at Peenemünde, not only of the Me 163 but also of the A-4 missile, had become known to the Allies with the result that the facility was heavily bombed on 17/18 August. Although *Erprobungskommando 16* was little affected by the bombing, the attack forced the transfer of its seven Me 163 As and one B to Bad Zwischenahn west of Oldenburg in north-west Germany.

Shortly afterwards the unit received an influx of 21 new pilots who were to form the basis of the world's first operational rocket fighter unit. From September, altitude acclimatisation began on the Zugspitze mountain under the direction of the *Institut für Luftfahrtmedizin* in München, and a captured Russian pressure chamber was also made available at Bad Zwischenahn.

On 30 November the *Kommando* suffered its first fatality when *Ofw.* Alois Wörndl was killed flying the Me 163 A V6. The accident was held to be due to the pilot's over-exuberance. Exactly a month later, a second pilot was lost when the Me 163 B V8 flown by *Oblt.* Pöhs struck a radio mast after his engine cut shortly after take-off. Pöhs' place as Technical Officer was taken by *Oblt.* Otto Böhner.

By this time only four Me 262 jet fighter prototypes were flying, the V1, V3, V6 and V7, all of which were under test at Lechfeld, a *Luftwaffe* airfield near Augsburg used by Messerschmitt. Although Späte had flown the type in April, it was not until 9 December 1943 that the first *Luftwaffe* experimental unit, designated *Erprobungskommando 262*, was formed to develop the type. This unit, which was also based at Lechfeld, was led by the experienced combat pilot who had previously led 4./ZG 2, *Hptm.* Werner

Thierfelder. On 21 December he and another accomplished fighter pilot, *Major* Egon Mayer, commander of JG 2, flew the sixth prototype Me 262, the first to be fitted with a retractable tricycle undercarriage.

Although Thierfelder had begun flying the Me 262 in December, it was not until 20 January 1944, that he was joined by *Fw.* Helmut Baudach and *Fw.* Erwin Eichhorn from JG 2 and *Fw.* Helmut Lennartz from JG 11, with *Oblt.* Wörner arriving from ZG 101 at the end of February. As with the Me 163 *Kommando*, testing was not without danger, Thierfelder escaping unhurt on 1 February when the Me 262 V5 which he was flying, crashed and was destroyed.

Meanwhile, in January 1944, the first *Luftwaffe* ground crews arrived at Bad Zwischenahn, and during the same month several 'sharp starts' were made with the first combat-ready Me 163 B by Späte and Opitz. Powered flights increased during the next two months although the ground crews began to suffer problems with a lack of spares. During March 1944 tests were made with a special plastic covered parachute as it was realised that escaping *T-Stoff* would quickly cause the normal fabric parachute to burst into flames.

The *Kommando* now began to fly the first simulated combat sorties. The plan was for the Me 163 to climb at a 45 degree angle at a speed of between 700 and 800 km/h (435 and 500 mph)

approaching the bomber stream which it was predicted would be at around 6,000 m (20,000 ft) from behind. Not long after attaining this altitude, which would take about two and a half minutes, it was anticipated that the rocket engine would cut and the fighter would then attack the bombers in a shallow dive. Because of the extremely short combat radius of the *Komet* (about 70 km or 43 miles), it was proposed to establish a line of combat bases between the Belgian and Danish borders with a secondary line on the approach to Berlin.



ABOVE: The four men shown here, test pilot Gerd Lindner, Willi Messerschmitt, Werner Thierfelder and Gerhard Caroli, played a most important part in the development of the Me 262. Thierfelder was born on 24 December 1915 in Berlin, but grew up in South West Africa (now Namibia). He studied at Göttingen University before joining II./ZG 26, part of the famous 'Horst Wessel' Geschwader, at the beginning of the war. After combat during the battles for France and Britain and then in the Balkans and Crete, he was awarded the Knight's Cross on 10 October 1941 for 14 aerial victories and the destruction of 41 aircraft and six trains on the ground. He joined II./ZG 2 in May 1942 and was promoted to Staffelfkapitän of 4./ZG 2. On 1 October 1942 he transferred to the Staff of the General der Jagdflieger where much use was made of his extensive technical knowledge. He was appointed to lead *Erprobungskommando 262* on 15 December 1944, and became, at the same time, commander of III./ZG 26. By this time he had destroyed 27 aircraft in the air plus 41 on the ground.

On 19 April the first Me 262, the V8, was delivered to *Erprobungskommando 262*, Lennartz making his first jet flight on that day. Early the next month, 14 pilots from III./ZG 26 (minus 7. *Staffel*), which had been flying Bf 110s from Königsberg-Neumark against USAAF bombers, were ordered to transfer to Lechfeld for conversion to the Me 262. Advanced detachments arrived on 10 May, ground staff from 8./ZG 26 going to the Messerschmitt assembly plant at Leipheim, those from 9./ZG 26 to Schwäbisch Hall for technical familiarisation. During the middle of May two further Me 262s were delivered to the unit while ten pilots began conversion training. They were *Oblt.* Hans-Günther Müller (*Staffelkapitän* of 8./ZG 26), *Oblt.* Paul Bley (*Staffelkapitän* of 9./ZG 26), *Oblt.* Günther Wegmann, *Lt.* Joachim Weber, *Lt.* Alfred Schreiber, *Ofw.* Hubert Göbel, *Ofw.* Helmut Recker, *Ofw.* Strathmann, *Fw.* Heinz Herlitzius and *Uffz.* Hans Flachs.

Despite the accelerated operational development of the Me 262 it was the Me 163 that was to fly the world's first combat sortie by a non propeller-driven aircraft. This took place when *Major* Späte, flying the Me 163 B V41 which had been over-enthusiastically painted bright red overall by the ground crew, took off on 14 May 1944 to intercept a group of USAAF aircraft approaching Bremen. Within minutes he spotted two P-47s vertically above him, but almost immediately his engine flamed out. Waiting the obligatory 2 minutes, he relit the engine and accelerated after the American fighters. Approaching 900 km/h (560 mph), the port wing suddenly kicked downwards as compressibility effects began to manifest themselves. Späte tried to correct, but by the time he had stopped the aircraft from shaking, the rocket had cut again and he was forced to abandon the sortie.

Späte undertook a second sortie that day, but did not manage to intercept. Shortly afterwards, he left the *Kommando* to take over IV./JG 54 on the Eastern Front, his place being taken by *Hptm.* Toni Thaler. A third sortie was undertaken by *Ofw.* Werner Nelte on 20 May in the Me 163 B V40 and two days later *Oblt.* Opitz flew a fourth in the B V33. A fifth operation was flown on 28 May by *Oblt.* Langer, but like the previous two, no contact was made with the enemy.

The recent flurry of activity at Bad Zwischenahn soon attracted USAAF attention and on 30 May 80 B-17s bombed the airfield. One or possibly two Me 163s were destroyed and five others damaged plus several Bf 110 glider tugs and an assortment of gliders and communications aircraft. Following the attack, basic training was temporarily transferred to Brieg on the Oder, but recommenced at Bad Zwischenahn on 15 June. Six days later another of the *Kommando's* veterans, *Oblt.* Langer was killed when his Bf 108 crashed in fog.

On 18 July, *Erprobungskommando 262*, which was continuing to work up at Lechfeld, suffered a severe blow when *Hptm.* Thierfelder was killed. He had apparently taken off in the Me 262 S6 to engage a formation of US bombers near Landsberg/Lech but failed to return. It is possible that he was shot down by P-51s, but the more likely cause of his loss was a technical failure. Thierfelder did manage to bale out, but he was too low for his parachute to open.

Seven days later *Lt.* Alfred 'Bubi' Schreiber, flying an Me 262 coded 'White 4', claimed the destruction of a Mosquito over Bavaria. This was possibly an aircraft of 544 Squadron which, unbeknown to Schreiber, managed to return to its base in Italy. On 30 July, *Fhr.* Herbert Kaiser baled out from a Me 262 due to an engine fire near Biberbach, but he escaped unhurt. Three days later the *Kommando* claimed its second victory, a reconnaissance Spitfire, also destroyed by *Lt.* Schreiber.

Thierfelder's place as commander of the *Kommando* was taken by *Hptm.* Horst Geyer on 5 August and other key personnel included *Oblt.* Günther Wegmann as *Adjutant*; *Hptm.* Heinrich Richter as *Major beim Stab* and *Oblt.* Georg Wiing as Technical Officer. On 8 August *Lt.* Joachim Weber claimed the unit's second Mosquito, an aircraft from the US 802nd Reconnaissance Group, over the Ammersee, south-west of München. Seven days later a Mosquito piloted by Capt. Saloman Pienaar of 60 Squadron, South African Air Force, was intercepted by a Me 262 as it attempted to photograph Leipheim airfield but escaped. On the same day, *Fw.* Helmut

Lennartz and *Ofw.* Kreutzberg intercepted a lone B-17 near Stuttgart, the former pilot blowing off its port wing with his 30 mm cannon. Three days later another Mosquito of 544 Squadron was intercepted by an Me 262 over Geibelstadt but escaped without damage.



ABOVE: Two of the first pilots to reach *Erprobungskommando 262* were *Fw.* Erwin Eichhorn and *Fw.* Helmut Lennartz who came from JG 11. They are in the centre of this photograph and are flanked by *Fhr.* Kaiser and *Fw.* Oppers.

BELOW: *Lt.* Alfred 'Bubi' Schreiber was the first jet pilot to claim the destruction of an enemy aircraft, a Mosquito reconnaissance machine, on 26 July 1944. However, there is no corresponding Allied loss, and it is probable that the aircraft claimed by Schreiber was the Mosquito of 544 Squadron piloted by *Flt. Lt.* A.E. Wall which reported escaping from a jet fighter a day earlier.



1944-1945

On 15 August between 120 and 140 USAAF bombers again attacked Bad Zwischenahn, but although the runway and airfield buildings were damaged, no aircraft were lost. Flight operations recommenced on 23 August, but resulted in the death of *Fw.* Richard Lukas (flying the B V28 C1+01) in a landing accident. Early in September, Galland visited *Erprobungskommando 16* and informed Thaler that the unit was to be disbanded. The *Kommandoführer* protested, saying that the unit had still to finish developing combat procedures for the Me 163 B and would be needed to introduce the improved Me 163 C. The order was then rescinded, but in October 1944 the unit transferred to Brandis near Leipzig.

Meanwhile, on 18 August, the 8. *Staffel* of ZG 26 moved to Rechlin-Lärz to form the first *Einsatzkommando* for operations against Allied reconnaissance aircraft. The unit's pilots were *Oblt.* Müller, *Lt.* Weber and *Fw.* Lennartz with *Lt.* Preusker as fighter controller. Six days later, *Ofw.* Helmut Baudach of *Erprobungskommando 262* claimed an F-5 Lightning reconnaissance aircraft, and on the 26th *Lt.* Schreiber shot down a Mosquito of 60 Squadron and *Ofw.* Recker a Spitfire, possibly from 683 Squadron.

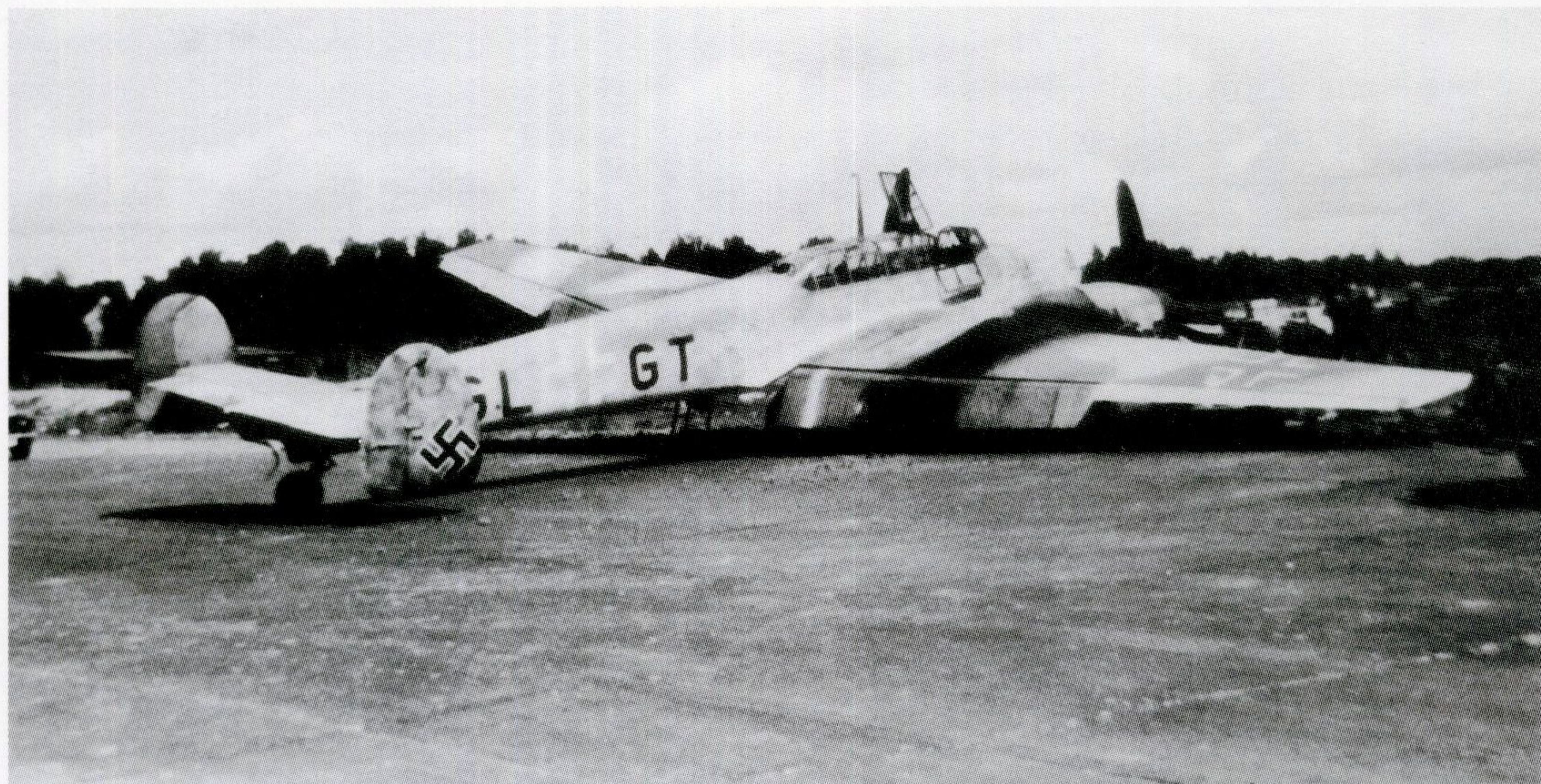
At the end of August 1944 a document was issued by Galland's office detailing the proposed fighter development programme for the Me 262. Three *Einsatzkommandos* were to be established at Lechfeld, Rechlin-Lärz and Erfurt-Bindersleben, each being led by an officer with the powers of a *Staffelkapitän*. They were to iron out technical problems, develop tactical procedures and evolve a training programme for the Me 262 fighter which could be used singly or on *Rotte*, *Schwarm*, *Staffel* or *Gruppe* operations. At the same time III./ZG 26, comprising the *Stabskompanie* and the 8. and 9. *Staffeln*, was to continue training at the Messerschmitt airfields at Leipheim, Schwäbisch Hall and Lechfeld.

On 5 September, *Lt.* Schreiber from *Erprobungskommando 262* shot down an American Spitfire XI flown by *Lt.* Robert Hilborn of the 7th Photo Recon Group, his 30 mm cannon 'shredding' the American aircraft. Next day *Ofw.* Göbel intercepted an RAF Mosquito from 540 Squadron which he claimed destroyed. On 11 September the US Eighth Air Force reported its first engagement with jet fighters. One of its formations was attacked near Leipzig, but this was almost certainly by a Me 163 from I./JG 400 based at Brandis. A P-51 Mustang fighter piloted by *Lt.* William A. Jones of the US 339th Fighter Group was, however, shot down by *Ofw.* Helmut Baudach of *Erprobungskommando 262*. On 14 and 18 September *Lt.* Joachim Weber claimed a Mosquitos (his second and third jet victories), probably aircraft from 540 and 544 Squadrons respectively.

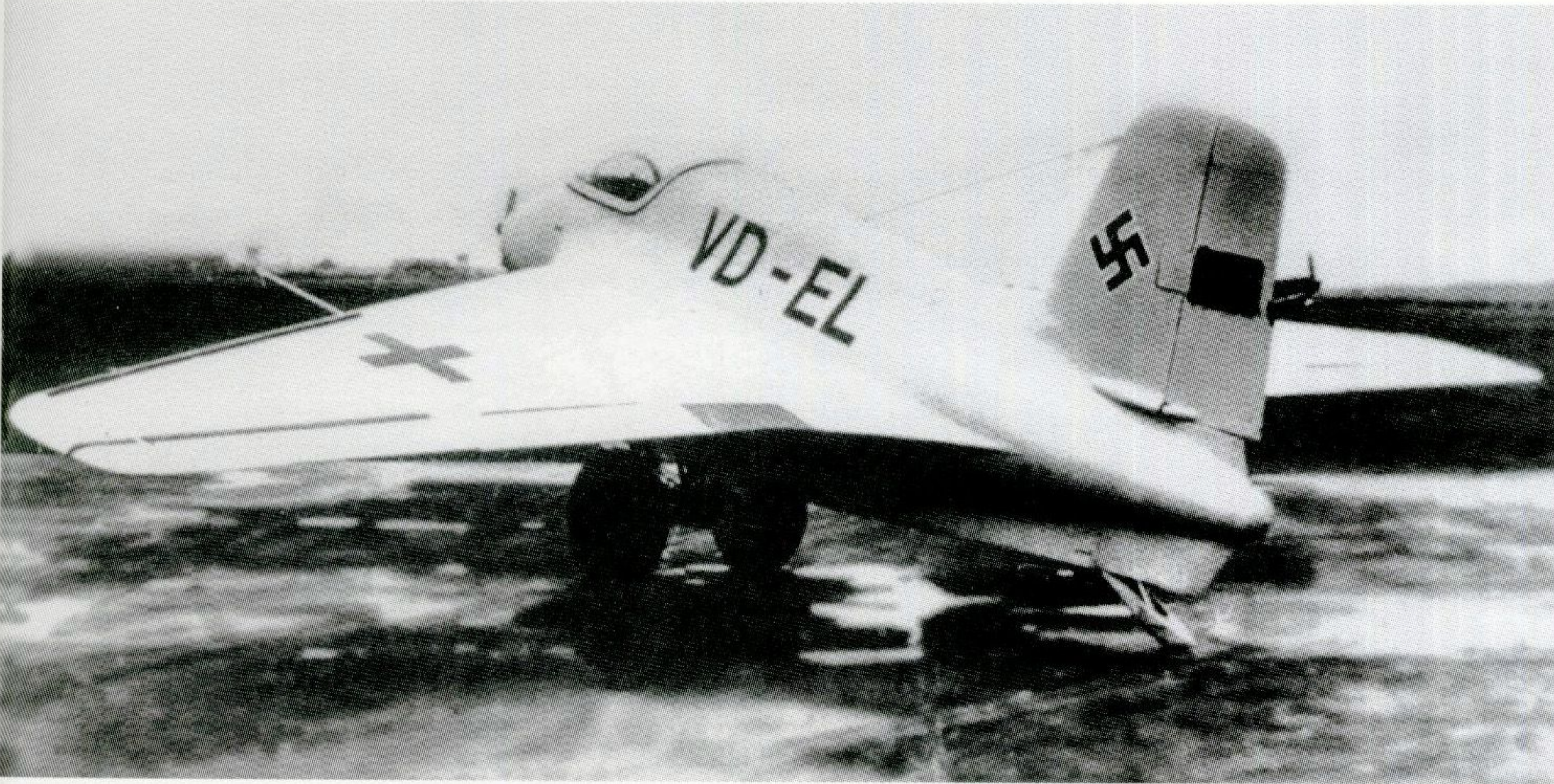
On 23 September *Erprobungskommando 262* declared a strength of 12 aircraft and 17 crews. Four days later, in what appears to have been a mainly paper transaction, the unit was redesignated 10./EJG 2. Horst Geyer, the commander of the unit, remembered nothing of this redesignation, and even *Luftwaffe* records seem confused. On 14 October a pilot from the unit, *Ofw.* Erich Haffke, was killed in a crash at Hochstadt/Donau. Different sources give his unit as *Erprobungskommando 262* and 10./EJG 2.



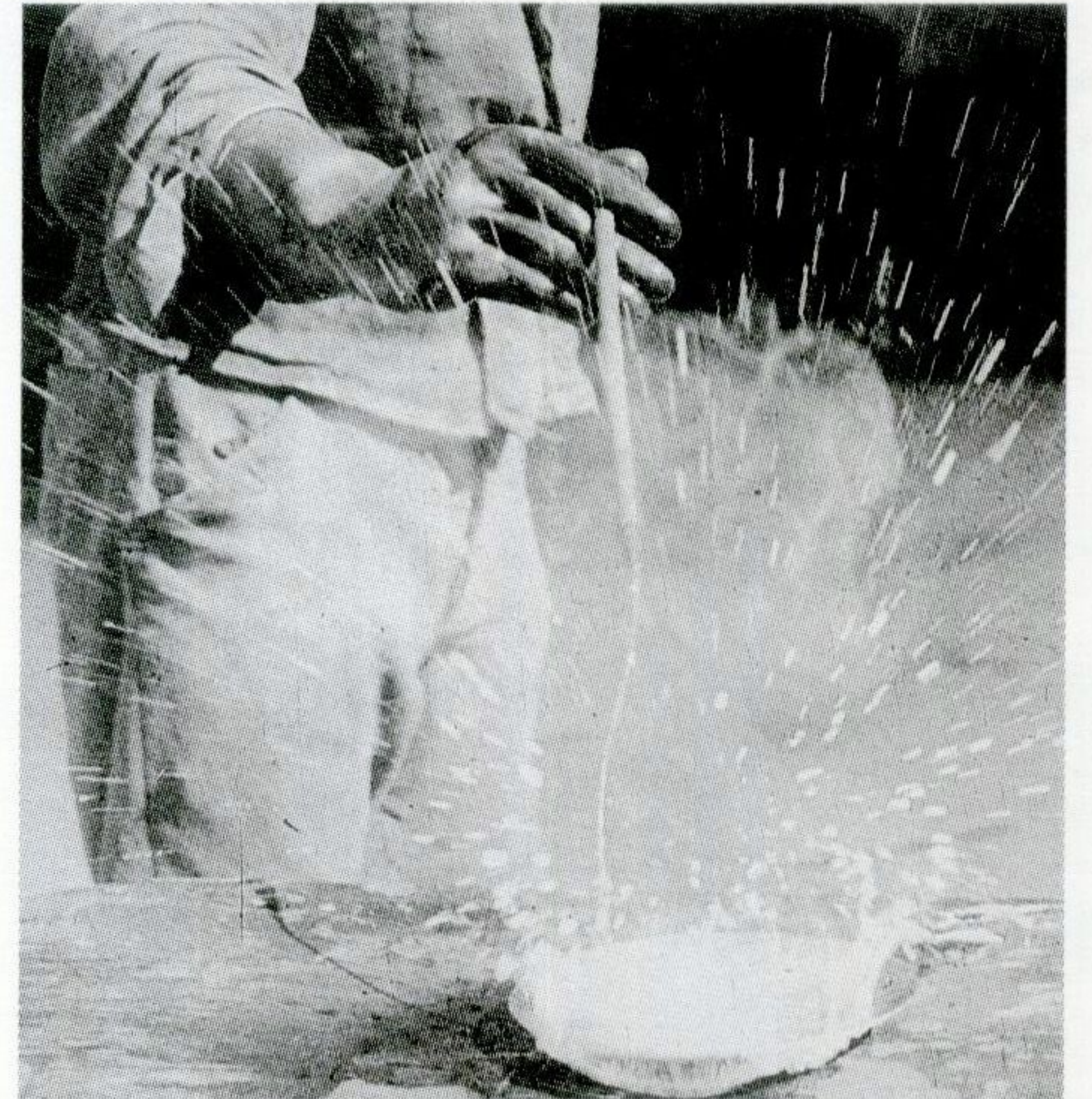
ABOVE: Hptm. Horst Geyer, centre, took over command of *Erprobungskommando 262* in August 1944 after the death of Thierfelder. He had previously commanded another experimental unit, *Erprobungskommando 25*, which tested various anti-bomber weapons.



RIGHT: The Bf 110 was used in some numbers to tow the Me 163 glider when flying test or training missions. This aircraft belonged to the Hans Klemm Flugzeugbau at Jesau which built a number of Me 163s under licence.

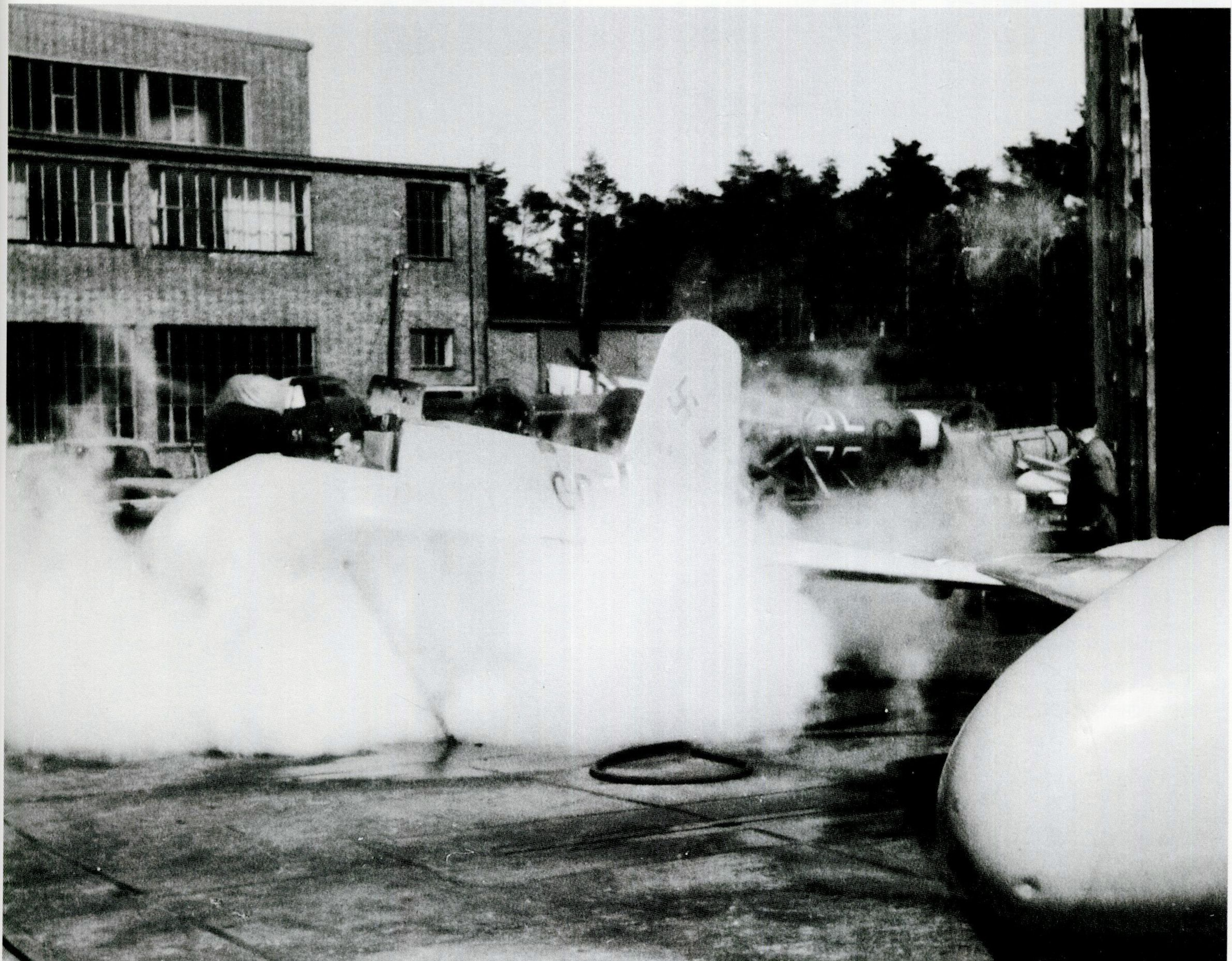


BELOW: Taken from a training film for Me 163 ground crew, this dramatic photograph shows the effect of adding a small drop of one rocket fuel component to a saucer of the other.



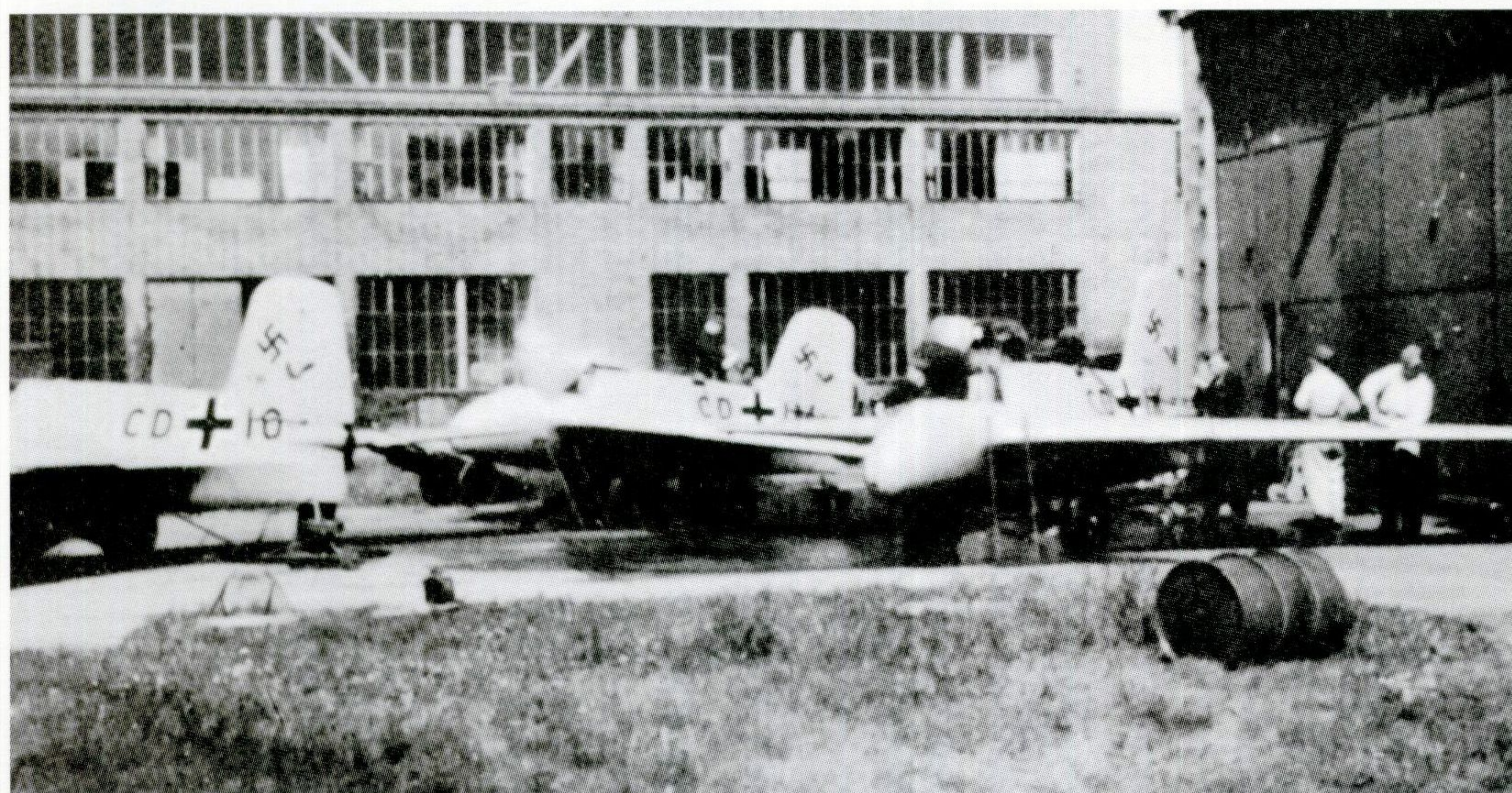
ABOVE: The Me 163 B V2 was the second prototype of the B-series and the first to be fitted with armament and radio equipment. It made its first powered flight on 24 June 1943 piloted by 'Rudi' Opitz.

BELOW: A rocket engine test being carried out on the Me 163 B V6. The clouds of steam emanating from the engine exhaust are typical of such a test.



1944-1945

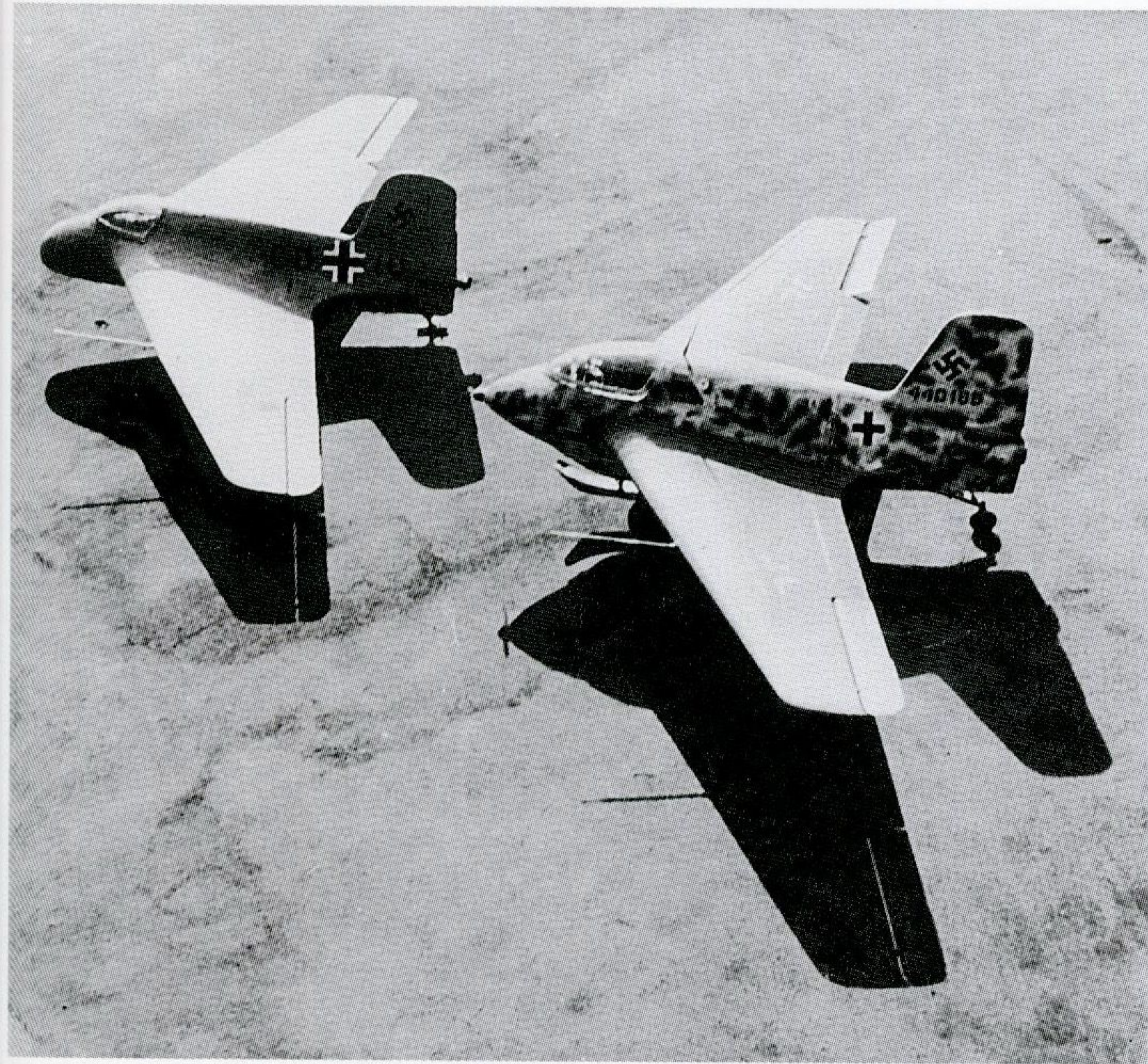
RIGHT: Apart from developing the Me 163 for service use, Wolfgang Späte and Erprobungskommando 16 were also responsible for evaluating other new fighters with revolutionary power plants including the Me 262 and Me 328. Späte therefore flew the Me 262 V2 on 17 April 1943, communicating his enthusiasm for the new aircraft to the General of the Fighters, Adolf Galland.



LEFT: Work on a group of Me 163 As being carried out at Peenemünde during the summer of 1943. From left to right are the Me 163 A V6, A V8 and A V10.

RIGHT: An Me 163 A being manhandled from its hangar at Peenemünde. In addition to the two-wheeled take-off dolly, the ground crews had another small trolley to support the tailskid.





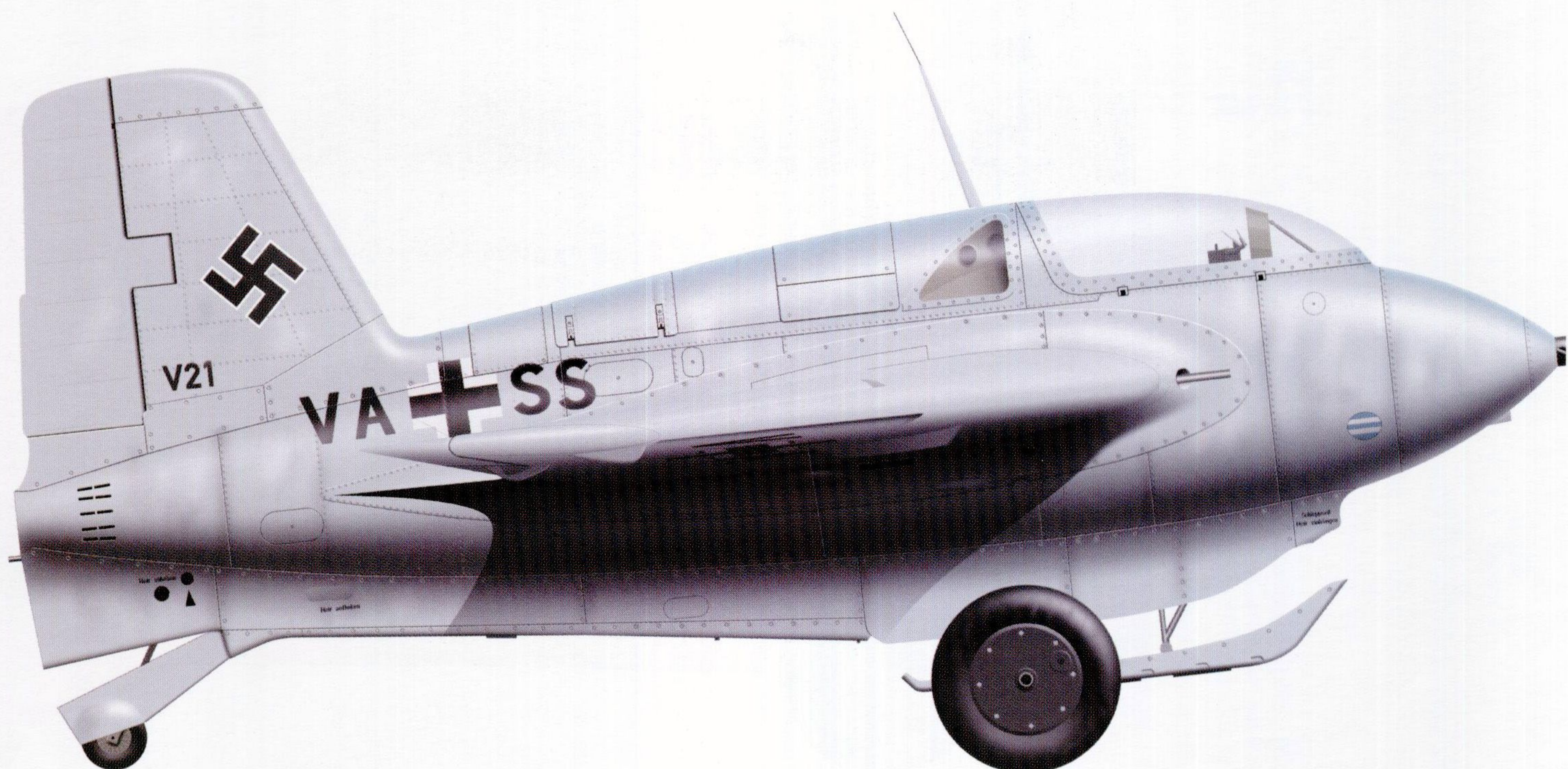
LEFT: This plan view gives an excellent impression of the differences between the Me 163 A and the much bulkier B-series which was designed for operational use.



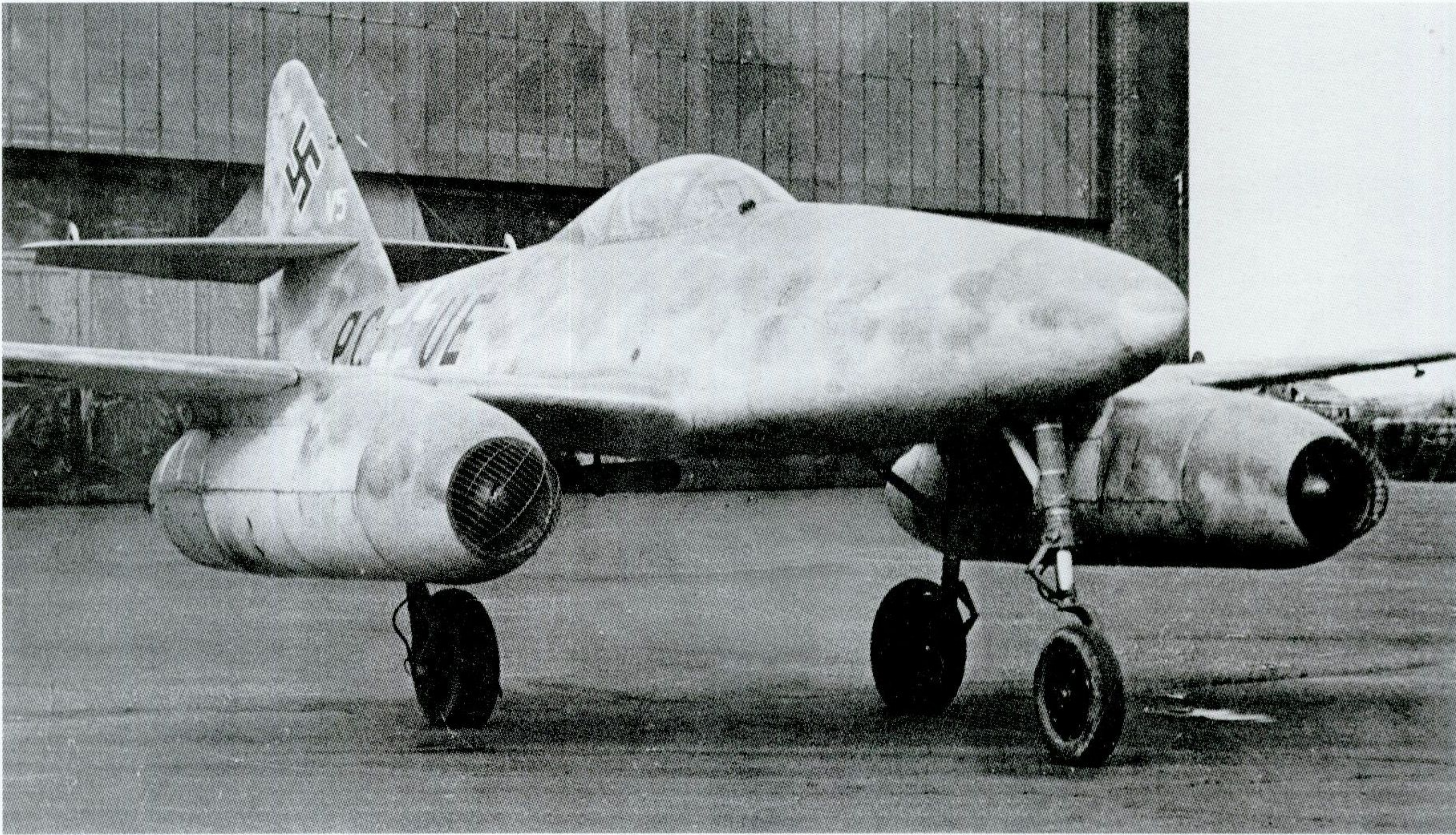
RIGHT: 'Heini' Dittmar poses with Me 163 BV21, VA+SS which was delivered to Peenemünde at the beginning of June 1943. The aircraft had been fitted with its rocket engine at the Walter factory in Kiel and made its first flight piloted by Lt. Opitz on 24 June.

Messerschmitt Me 163 B V21 (W.Nr. 163 100 30) of Erprobungskommando 16 at Peenemünde-West, June 1943

The early B-series Me 163s had a pale blue (RLM 76) finish overall with black Stammkennzeichen. This aircraft, the V21, made its first 'sharp start' (powered) take-off on 24 June 1943 with Rudi Opitz at the controls. It was damaged in a USAAF bombing raid on Bad Zwischenahn on 30 May 1944.



RIGHT: The Me 262 V5 crashed and was badly damaged on 1 February 1944 when the nose wheel leg collapsed. The pilot, Hptm. Werner Thierfelder of Erprobungskommando 262, was unhurt.



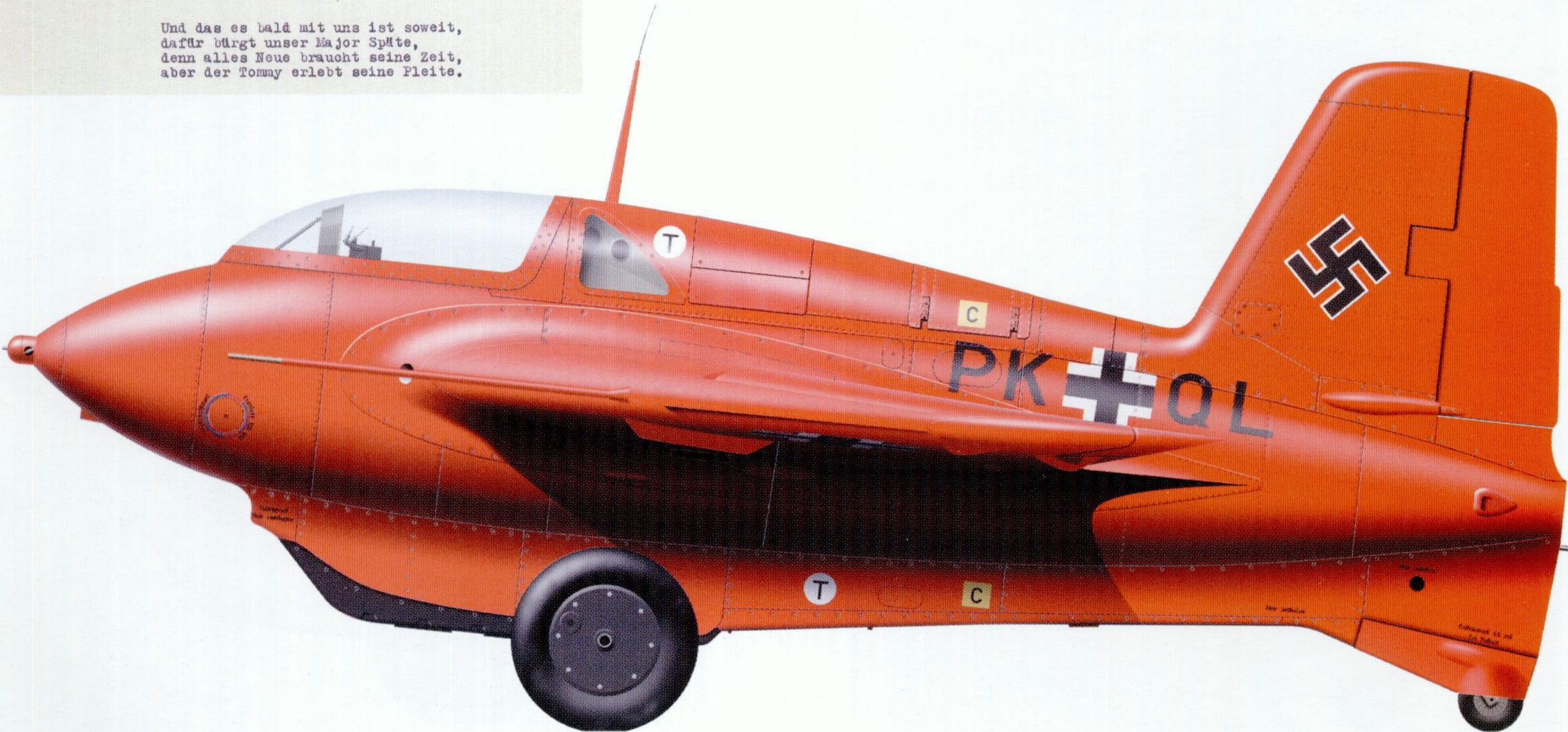
LEFT: A series of sketches and rhymes were produced to celebrate the second anniversary of Erprobungskommando 16. This page shows the first operational Me 163 sortie flown by Wolfgang Späte in an aircraft which had been painted red overall.



Und das es bald mit uns ist soweit,
dafür bürgt unser Major Späte,
denn alles Neue braucht seine Zeit,
aber der Tommy erlebt seine Pleite.

Messerschmitt Me 163 B V41 (W.Nr. 163 100 50) of Erprobungskommando 16 at Bad Zwischenahn, 14 May 1944

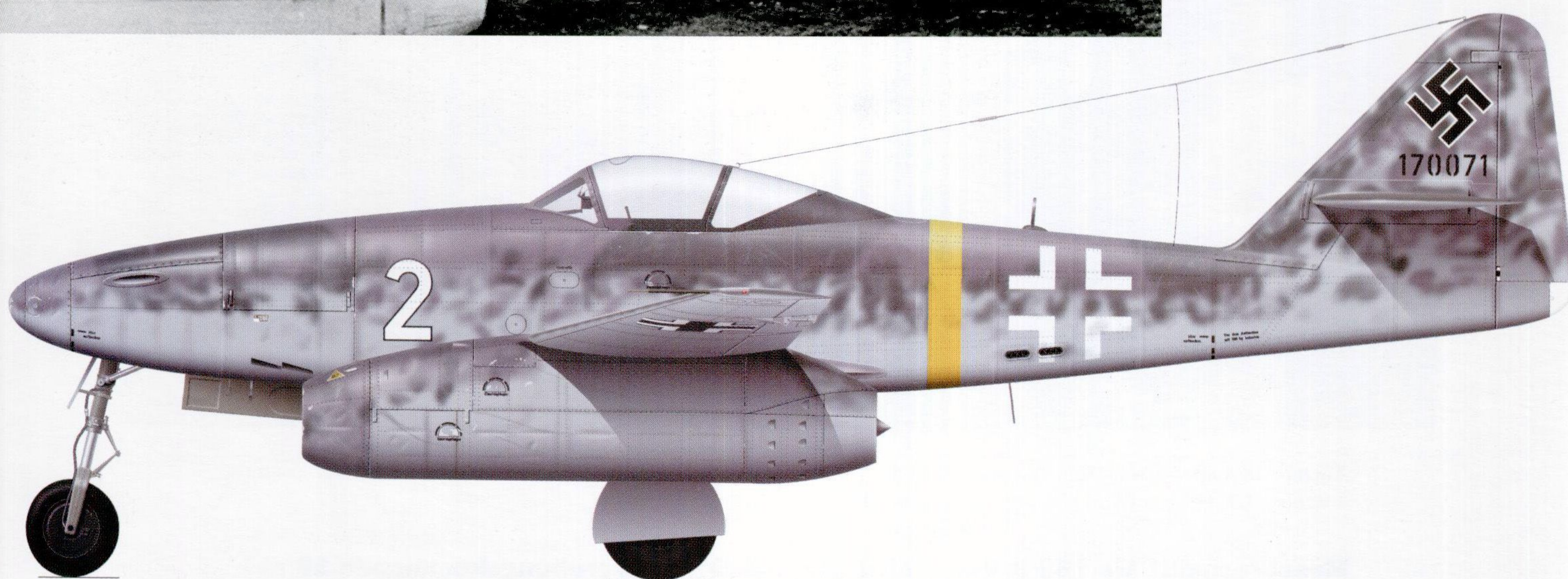
Prior to the Me 163's first operational flight the ground crew painted the aircraft red overall, perhaps in memory of the famous 'Red Baron', Manfred von Richthofen. Wolfgang Späte flew a sortie against a USAAF formation in this aircraft on 14 May 1944, but without success.



1944-1945



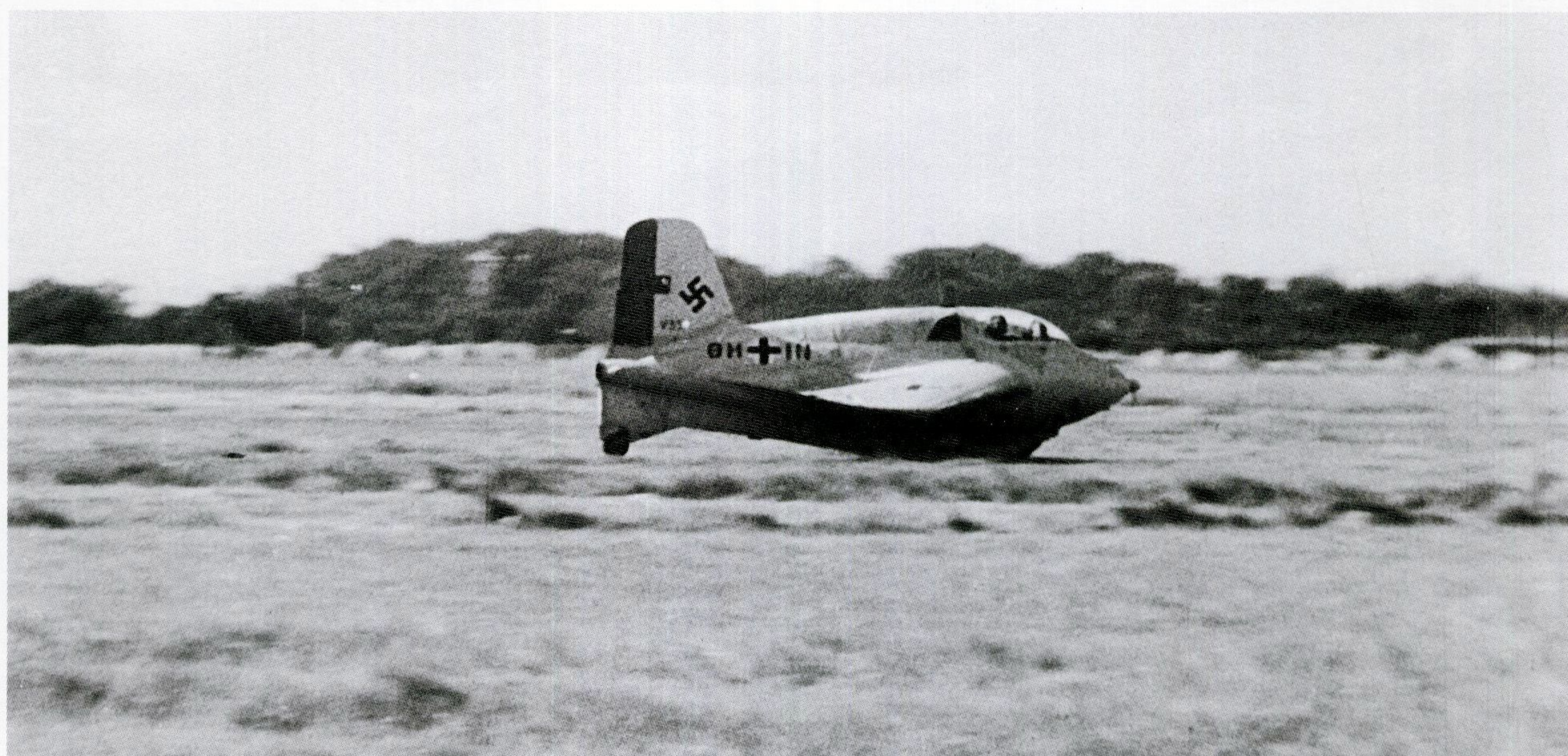
LEFT: A line-up of eight Me 262s of Erprobungskommando 262 photographed at Lechfeld during August 1944. The three aircraft in the foreground are 'White 2' (W.Nr. 170071), 'White 3' (W.Nr. 170067) and 'White 5' (W.Nr. 170045).



Messerschmitt Me 262 A-1a (W.Nr. 170071) of Erprobungskommando 262, Lechfeld, August 1944

One of the first operational Me 262s, this aircraft was painted in dark grey and medium grey (RLM 74 and 75) uppersurfaces with pale blue (RLM 76) beneath. It was delivered to Erprobungskommando 262 on 1 August 1944, but a report issued by the Obb. Forschungsanstalt Oberammergau on 13 October noted that it had deformed wing surfaces. After repair it was transferred to III./EJG 2 and flown by Major Erich Hohagen on 15 November. In May 1945 it was discovered abandoned on an autobahn near Lechfeld by US forces.

RIGHT: The Me 163 B V35 comes in to land at Bad Zwischenahn. Although painted pale blue, this aircraft was similar to the V41 in which Späte made the first interception of a USAAF bomber formation on 14 April 1944.



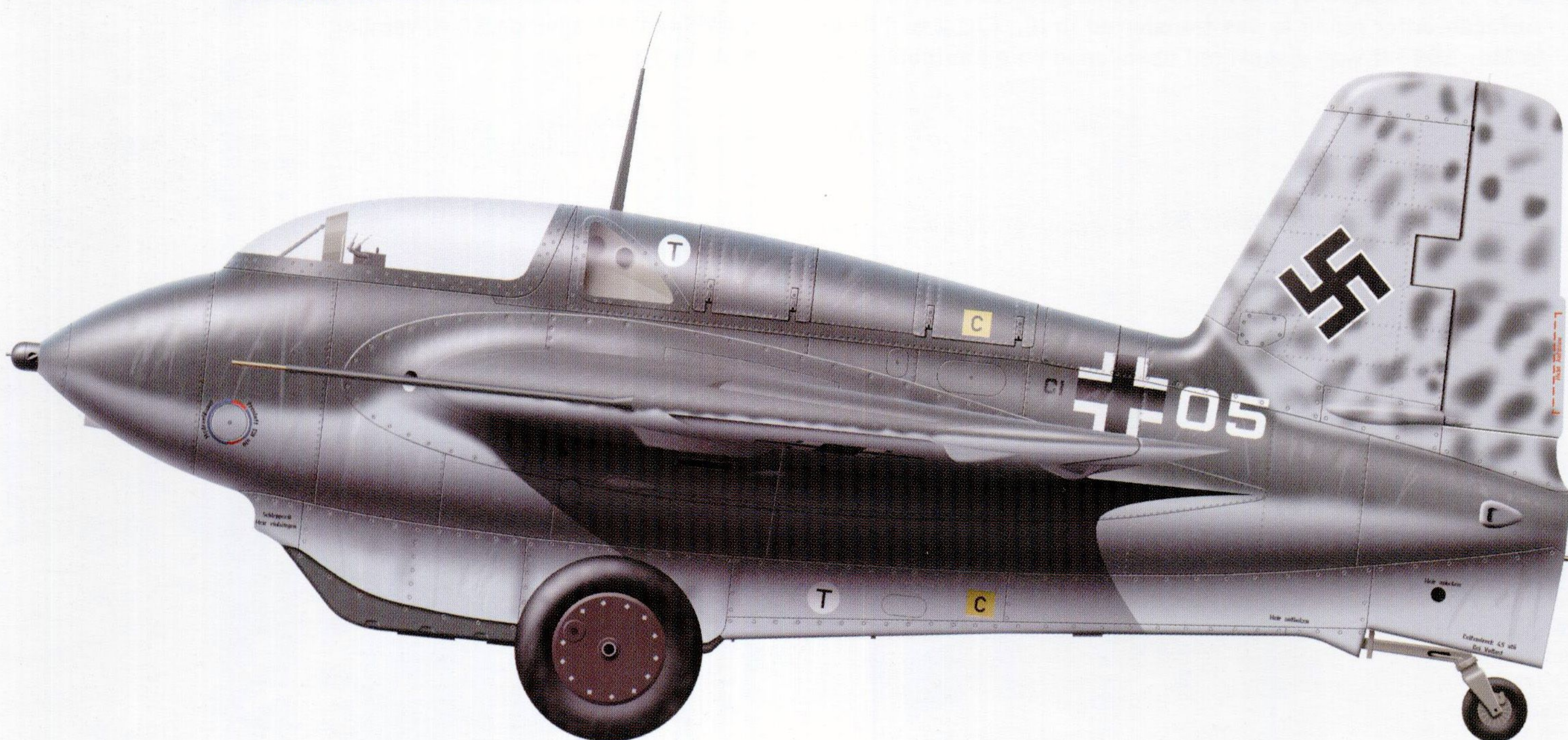
1944-1945



ABOVE: In August 1944, EKdo 16's remaining Me 163s were repainted with a new camouflage scheme and given the unit code C1. Me 163 BV45 was given the code C1+05.

Messerschmitt Me 163 B V45 (W.Nr. 163 100 54) of Erprobungskommando 16 at Bad Zwischenahn, July 1944

This aircraft has dark brownish green and mid-green (RLM 81 and 82) camouflaged upper surfaces with pale blue vertical tail surfaces mottled in the same colours. The black four-letter Stammkennzeichen had been replaced by an operational code, 'C1', in black followed to the right of the fuselage Balkenkreuz by the white number '05'.





LEFT: Apart from its exceptional performance, one of the advantages of the Me 262 was that it used a low-grade diesel oil, known as J2, as its fuel. An airfield control officer watches as one of Erprobungs-kommando 262's jets is refuelled by an Opel Blitz tanker. The legend 'J2' has been painted on the side of the vehicle to identify that it carries the special low-grade type of Diesel fuel used by German jet aircraft.

BELOW: To prevent large objects (and even unwary ground crew) from being ingested into the turbojets of the Me 262, special red-painted 'baskets' were fitted over the intakes. This aircraft is 'White 5' (W.Nr. 170045) of Erprobungskommando 262 and the machine in which Lt. Joachim Weber intercepted a Mosquito reconnaissance aircraft at high-altitude over the Ammersee on 8 August 1944.



Combat April-November 1944

'The first fighter operations should provide the experience necessary to overcome the shortcomings and mistakes in any new design. The pilots must therefore be trained to recognise the real shortcomings. Failing completely to appreciate this state of affairs, Major Nowotny has selected the following point, among others, which he considers important. He feels that the electric starter handle, which is located at present on the starboard side console, should be replaced by a button on the instrument panel. The starter is only used once for each engine before a flight. It is totally unimportant whether it is installed on the right or at the front.'

*Fritz Wendel, Messerschmitt test pilot,
reporting on the activities of Kommando Nowotny*

As the Me 163 and Me 262 began to prove their ability, two fighter units were set up to exploit this potential. The first, equipped with the Me 163, was designated 20./JG 1 and established at Wittmundhafen early in February 1944. Its pilots and ground crews underwent training with *Erprobungskommando 16*. By the end of the month its pilots had made 86 flights in the Me 163 A and 82 in the B, including a 'sharp start' by the *Staffel Kapitän*, Hptm. Robert Olejnik. On 1 March the unit was redesignated 1./JG 400, receiving its first ten pilots by the 7th, with three others a little later. The first operational Me 163 B was delivered by Opitz on 10 March and by the 20th a total of six aircraft had arrived.

On 6 April a 2. *Staffel* was officially added to the fledgling *Geschwader*, and was based at Oranienburg in North Germany before transferring to Venlo in the Netherlands at the end of July. At this time the unit had 12 pilots. Meanwhile, on 21 April, Olejnik crashed after his engine lost power on take off. He suffered head injuries and crushed vertebrae. His place was temporarily taken by *Obt.* Otto Böhner who had previously led 2./JG 400, acting command of this *Staffel* passing to *Lt.* Heinz Schubert. Böhner himself was injured when his

Me 163 B V57 made a heavy landing on 28 May which forced Olejnik to return, still in plaster. By this time several additional aircraft had been received from the Klemm factory at Böblingen.

Around 10 July 1944, 1./JG 400 began transferring to Brandis near Leipzig with the task of protecting the vital oil distillation plant at Leuna west of the city. All the unit's Me 163s were air towed by Bf 110s to the new base. At about the same time a training and replacement *Staffel* (*Erg./JG 400*) was established under *Obt.* Franz Medicus from crews provided by *Erprobungskommando 16*. It soon joined the operational squadron at Brandis.

The first operational sortie flown by 1./JG 400 took place on 19 July when *Uffz.* Kurt Schiebeler, flying the Me 163 B V50, PK+QU, attempted to intercept a P-38 but without success. Eight days later a Me 163 was reported by an RAF formation for the first time. Next day an American bomber formation spotted an Me 163 near Leipzig and on the 29th the destruction of the first *Komet* was claimed by a P-38 of the 479th Fighter Group, but there are no corroborating records of this in German files.

1./JG 400's first successful operation came on 16 August when five Me 163s took off to intercept a formation of B-17s. Two pilots, *Fw.* Siegfried Schubert and *Lt.* Hartmut Ryll both claimed the destruction of a bomber, but Ryll was later shot down and killed by two P-51s and *Fw.* Herbert Straznicky baled out from his Me 163 B after it was shot up by American gunners. Perhaps JG 400's most successful operation was flown on 24 August when



ABOVE: Hptm. Robert Olejnik, (left) the first *Staffelkapitän* of 1./JG 400 salutes *Obt.* Franz Rösle who later became leader of the 3. *Staffel*. The aircraft in the background is a Bf 110 glider tug.

BELOW: Hptm. Otto Böhner who led 2./JG 400 between July 1944 and February 1945 prepares to take off in his Me 163 B. The Werknummer 440014 and the distinctive spotted camouflage pattern establishes that this was a Klemm-built aircraft.



eight Me 163s (J-W 5-4 061) took off to attack another American bomber formation. This time three bombers were shot down, one by *Lt.* Hans Bott, one by *Fw.* Straznicky and another by *Fw.* Schubert.

Previously, on 19 August, an order was issued for the expansion of JG 400. A *Gruppe Stab* was to be formed at Brandis and placed under the command of the veteran *Komet* pilot, *Major* Späte. A 3. *Staffel* was established at Stargard under *Oblt.* Franz Rösle and the formation of 4., 5. and 6./JG 400 planned. On 3 September, with Allied forces threatening its base at Venlo, 2./JG 400 moved to Brandis, three days being taken to ground-tow the disassembled aircraft to its new base.

On 9 September, *Lt.* Fritz Kelb was forced to bale out from his Me 163 after it caught fire on take-off and four days later *Oblt.* Rösle suffered severe facial injuries after the engine of his *Komet* cut as it left the ground (J-W 5-4 062 & 63). These were not the only problems that were besetting the unit, however. In August one of the main factories producing *C-Stoff* in Kiel was destroyed in a bombing raid and the arrival of other supplies of rocket fuel were often delayed due to Allied raids on the transport system.

As more problems began to affect JG 400, moves were made to establish the first Me 262 jet fighter unit. On 26 August Adolf Galland ordered the various *Einsatzkommando*, together with elements of the *Stabskompanie* and the signals platoon of III./ZG 26, plus part of *Erprobungskommando* 262, to form a new operational *Gruppe* under the command of *Major* Walter Nowotny, a JG 54 pilot who had just claimed his 255th victory on the Eastern Front. The new *Gruppe*, known as *Kommando Nowotny*, was to have three *Staffeln*, the first formed from 9./ZG 26, the second from 8./ZG 26 and the third newly formed.

The *Kommando* received orders on 27 September to transfer to Achmer and Hesepe near Osnabrück for operations against Allied bomber formations. By this time the unit had about 30 Me 262s divided between its three *Staffeln*. It actually arrived at its new bases on 3 and 4 October, but on the latter day the engine of *Hptm.* Alfred Teumer's aircraft flamed out as he attempted to land at Hesepe and he was killed in the resulting crash and fire. His place as commander of 2./*Kommando Nowotny* was taken by *Lt.* Franz Schall.

The first operational sortie was flown on 7 October when the *Kommando* intercepted USAAF bomber formations attacking targets in the Magdeburg area. *Lt.* Schall and *Fw.* Heinz Lennartz of the 2.*Staffel* took off from Hesepe and each destroyed a B-24, but the 1.*Staffel* was not so lucky. As *Oblt.* Bley, *Lt.* Gerhard Kobert and *Offhr.* Heinz Russel began their take-off runs from Achmer they were attacked by P-51 pilot, *Lt.* Urban L. Drew of the 361st Fighter Group. Russel escaped unhurt, but Kobert's aircraft exploded in a ball of flame, and Bley managed to bale out at low-altitude. In an attempt to prevent a repeat of this disaster, III./JG 54, which had just re-equipped with the Fw 190 D-9, was transferred to nearby Oldenburg to provide air cover for the *Kommando* during take-offs and landings.

I./JG 400's Me 163s were also engaged on the 7th. As they scrambled against the USAAF formation, *Fw.* Schubert's aircraft caught fire, somersaulted and exploded. *Uffz.* Kurt Schiebeler and *Fw.* Rudolf Zimmermann both shot down B-17s, but on landing, *Uffz.* Manfred Eisenmann was killed and *Fw.* Friedrich Husser injured.

On 10 October, Bley of Nowotny's *Kommando* claimed a P-51, but two days later he was forced to make a crash landing at Steenwyk, his Me 262 suffering light damage. After claiming the destruction of another P-51, *Fw.* Lennartz of 1./*Kdo Nowotny* was also compelled to make an emergency landing near Bramel. On the 13th, *Obering.* Lühner's aircraft crashed on take-off from Achmer and was destroyed and *Offhr.* Heinz Russel's Me 262 was heavily damaged as it attempted to make an emergency landing at Hesepe. Operations by the *Kommando* were not proving very successful, no less than ten aircraft being destroyed or damaged between 4 and 13 October. In an attempt to discover the reason, Messerschmitt dispatched a technical field team (*Technische Außendienst*) under test pilot Fritz Wendel to Achmer. His investigations resulted in the issuing of a damning report in late October in which he criticised the lack of training and Nowotny's somewhat reckless attitude:

'Instruction on the Me 262 is particularly bad with the *Kommando*. The importance given to the technical side may be illustrated by the fact that the *Gruppe* Technical Officer at Achmer, *Hptm.* Streicher, is not a technician. The *Staffel* Technical Officer at Hesepe, the 19-year-old *Offhr.* Russel, is also a complete layman, who has himself recently destroyed two aircraft as a result of carelessness and inadequate training. ...*Major* Nowotny is a successful Eastern Front pilot, but is unfamiliar with the present situation

BELOW: After returning from an operational sortie on 7 October 1944, the Me 163 B (W.Nr. 440013) piloted by *Lt.* Manfred Eisenmann of 2./JG 400 crashed and was destroyed. Eisenmann was killed.





ABOVE: Major Walter Nowotny was born on 7 December 1920 at Gmünd in Austria. He joined the Luftwaffe on 1 October 1939, but did not fly his first operational missions with 9./JG 54, until February 1941. He claimed his first victories on 19 July 1941, shooting down three Soviet I-153s. Awarded the Ritterkreuz after scoring his 56th victory on 4 September 1942, he took over command of 9./JG 54 on 25 October. During June 1943, he shot down no fewer than 41 aircraft, followed by another nine on 13 August and a further seven on 21st. On this day he took over command of I./JG 54, and on 4 September he became only the fourth pilot in the world to claim 200 victories. In September he was awarded the Oakleaves and Swords to the Knight's Cross and his victory tally increased to 250 less than a month later. On 19 October he became only the eighth person to be awarded the Diamonds to the Knight's Cross. He took over the training unit JG 101 in February 1944 before being assigned to establish the first fully operational Me 262 unit known as Kommando Nowotny. His eccentric manner, typified by his unconventional dress shown here, marked him unsuitable to command such a formation.

in the West and, at 23, is not the superior leader personality necessary to guarantee the success of this vital operation...'

Bad weather then prevented further operations by Nowotny's unit until 28 October when it attempted to intercept an American raid on Hamm. Two pilots, Lt. Schall and Lt. Alfred Schreiber, each claimed victories but Oblt. Bley was killed when his aircraft struck a flock of birds on take-off from Achmer. His place as commander of 1./Kdo Nowotny was taken by Oblt. Weber. Next day, Schreiber claimed an F-5 Lightning and later he rammed a Spitfire near Nordhorn. Fw. Büttner and Ofw. Göbel of Kommando Nowotny engaged a flight of P-47s, each claiming one destroyed.

During October 1944, in spite of Hitler's controversial edict that all Me 262s should be produced as bombers, a total of 52 fighters had been delivered, all except one going to Kommando Nowotny.

On 1 November, four Me 262s attacked a group of P-51 Mustangs from the US 20th and 352nd Fighter Groups. Near Zwolle, Ofhr. Willi Banzhaff of the 3.Staffel shot down a P-51 from the former Group but, as he continued his dive through the American formation, his Me 262 was attacked by a P-51 and a P-47. He baled out and escaped without injury. Next day the Kommando claimed three victories, a P-51 and a P-47 by Fw. Erich Büttner and a P-47 by Ofw. Helmut Baudach. On the debit side Uffz. Alois Zollner was killed when an engine of his Me 262 failed on take-off from Achmer, but Ofw. Hubert Göbel escaped when his aircraft was damaged in a taxiing accident.

I./JG 400's next significant, and disastrous, action came on 2 November during a US raid on the Merseburg-Leuna oil plant. Ofw. Jacob Bollenrath and Ofw. Straznicky of 1./JG 400 and Lt. Günter Andreas of 2./JG 400 were all shot down by the fighter escort. In addition the engine of Ofw. Horst Rolly's Me 163 cut on take-off. He baled out too low and, like Bollenrath and Straznicky, was killed.

Three Me 262s were lost on 4 November. Ofw. Göbel shot down a P-51 of the 356th Fighter Group near the Dummer Lake, but his Me 262 was destroyed when he attempted to make an emergency landing at Bohmte. Ofhr. Banzhaff was reported missing near Lüneburg and Ofw. Helmut Zander's aircraft was totally destroyed when he attempted a single-engined landing at Hesepe. Astonishingly, he was flung from the aircraft and survived unhurt.

On 6 November 1944, four more Me 262s from the Kommando were damaged, three of them in emergency landings all caused by running out of fuel. Lt. Spangenburg crashed near Lahnwerder, Ofw. Kreutzer near Ahlhorn and Ofw. Heinz Lennartz near Bremen. Each pilot escaped unhurt. According to American sources however, Spangenburg was shot down by Capt. Charles E. 'Chuck' Yeager's P-51. It is also possible that Lennartz's machine was shot down by Lt. William J. Quinn in the Bassum area south of Bremen. The fourth Me 262, piloted by Ofw. Baudach, was damaged in a taxiing accident at Hesepe. The only success achieved by the unit on this day was when Lt. Franz Schall destroyed a P-47.

Next day Generals Keller and Galland arrived to inspect the Kommando, the latter already disappointed by the poor showing of the unit. During the late morning of the Eighth the two senior officers were present as the unit scrambled to intercept an American bomber formation. Two aircraft, piloted by Major Nowotny and Oblt. Wegmann were to take off from Achmer and two, flown by Lt. Schall and Fw. Büttner, from Hesepe. The engines of Nowotny's 'White 8' refused to start, and Büttner's aircraft blew a tyre on take-off, causing slight damage, but Wegmann and Schall engaged the enemy, claiming a P-51 and P-47 respectively.

As the bombers returned during the early afternoon, Nowotny and Schall took off to intercept. Schall claimed two P-51s, but they were in fact both P-47s from the 356th Fighter Group. Shortly afterwards Schall's engines flamed out and he was caught and chased by a Mustang piloted by Lt. James W. Kenny of the 357th Fighter Group. The American raked the Me 262 with machine-gun fire giving Schall just enough time to bale out before it exploded in a ball of flame.

Nowotny was not so lucky. After shooting down a B-24 and a P-51, he was chased by a large number of Mustangs but after out-distancing them, he disappeared into cloud cover at 2,000 metres (6,500 ft). He then turned through 180 degrees which brought him towards a P-51 piloted by Lt. Richard W. Stevens of the 364th Fighter Group. Stevens

BELOW: Lt. James W. Kenny of the US 357th Fighter Group scored hits on the Me 262 flown by Oblt. Franz Schall on 8 November 1944, but the German pilot managed to bale out. The jet continued to fly for some time and Kenny managed to take a sequence of photographs from his Mustang, of which the image shown is one.





ABOVE: On 7 and 8 November, Generalleutnant Adolf Galland visited Kommando Nowotny at Achmer and is shown here talking to the unit's pilots. Galland was present when Nowotny was killed. Nowotny's death caused the unit to be withdrawn from operations.

managed to get behind the Me 262 and give it a two-second burst from 450 metres (500 yards). After the jet began to slow, he gave it another two-second burst and then followed it over an airfield firing all the time. Suddenly Nowotny's aircraft went into a steep, left hand turn and disappeared into the overcast. Horrified listeners on the ground heard Nowotny report over the radio: "Just made the third kill... left jet has failed... been attacked again... been hit..." and then his Me 262 crashed in flames north of Bramsche before he could bale out.

The loss of Nowotny sounded the death knell of the *Kommando*. Although it had claimed 18 confirmed victories, it

had lost a total of 26 Me 262s destroyed or damaged. Shortly afterwards it was transferred back to Lechfeld for retraining, *Hptm.* Georg-Peter Eder being appointed temporary commander before the arrival of *Major* Erich Hohagen.

Wendel submitted another critical report: "The *Kommando* was withdrawn for a refresher course at Lechfeld after four crashes on 8 November. This was ordered by *General* Galland who had been with the unit on 7 and 8 November. I have already stressed weaknesses and faults in the leadership and training of this *Kommando* in my last report. The pilots are only partly 'fighter trained' and go into action after only two flights in the 8-262¹. In this respect, they have never altered, and it was only after *Major* Nowotny was killed following an air battle with a large number of Mustangs, that *General* Galland gave the order for their 'removal'. The *Kommando* should be back to full strength in 8 to 10 days."

Just previously, at an armaments conference held early in November, Hitler had finally given permission to begin series production of the Me 262 as a *fighter* but with the stipulation that each aircraft "...must be capable of carrying at least one 250 kg (550 lb) bomb in case of emergency". This encouraged the formation of the first jet fighter *Geschwader* under the designation JG 7.

The original first two *Gruppen* of JG 7 had been established as early as August 1944 from remnants of the old bomber *Geschwader*, KG 1 'Hindenburg'. This unit, which had been operating the He 177 on the Eastern Front, was withdrawn to Königsberg to be re-equipped with the Bf 109 G-14. This plan was eventually abandoned, but in November the remnants of *Kommando Nowotny* under *Major* Hohagen became III./JG 7 and the formation of two additional Me 262 *Gruppen* planned. The first of these, I./JG 7, was formed on 27 November from II./JG 3 under *Major* Theo Weissenberger.

On 1 November two specialised *Gruppen* were formed to consolidate jet fighter training. The first of these was III./EJG 2 which was formed from Geyer's *Erprobungskommando* 262. It was equipped with the Me 262 and was expanded into three *Staffeln*, 9., 10. and 11. At the same time the *Ergänzungsstaffel* of JG 400, which had moved to Udetfeld on 15 October, was redesignated 13./EJG 2 and two further *Staffeln* (14. and 15./JG 400) established at Sprottau. Now known as IV./EJG 2, the *Gruppe* was equipped with Me 163s.

The first loss suffered by these units came on 16 November when *Obt.* Werner Glomb, *Kapitän* of 11./EJG 2 was killed when his Me 262 A-2a crashed near Unterschlaubach. On the same date Allied intelligence reported that the *Gruppe* had a strength of 18 aircraft and 12 crews with 69 pupils. Limited combat missions were flown by III./EJG 2. On 26 November three pilots from the unit, *Major* Rudi Sinner, *Lt.* Fritz R. Müller and *Ofw.* Hermann Büchner, took off to intercept Allied reconnaissance aircraft over Bavaria. Both Sinner and Buchner shot down an American F-5 Lightning, while Müller badly damaged a Mosquito from the South African Air Force. On the debit side, *Lt.* Schreiber, who had claimed *Erprobungskommando* 262's first victory was killed in an accident at Lechfeld.

Meanwhile, on 12 November, JG 400 had been expanded with the addition of a II. *Gruppe*. The 5. and 6. *Staffeln* were established by the renaming of 3. and 4./JG 400, while a II. *Gruppe* Stab and 7./JG 400 were newly formed. The *Gruppe* was then transferred to Stargard with a new 3. and later 4./JG 400 established at Brandis to bring the I. *Gruppe* back to full strength.

BELOW: *Hptm.* Horst Geyer (fourth from the left) looks on as a point is explained to *General* Galland (right) during his visit to *Erprobungs-kommando* 25 at Achmer in November 1943. Geyer took over command of *Erprobungs-kommando* 262 in August 1944 following the death of *Werner* Thierfelder. Behind Galland is *Major* Hans-Günther von Kornatzki, the commander of *Sturmstaffel* 1.



1 The prefix '8' denotes RLM aircraft designations

1944-1945



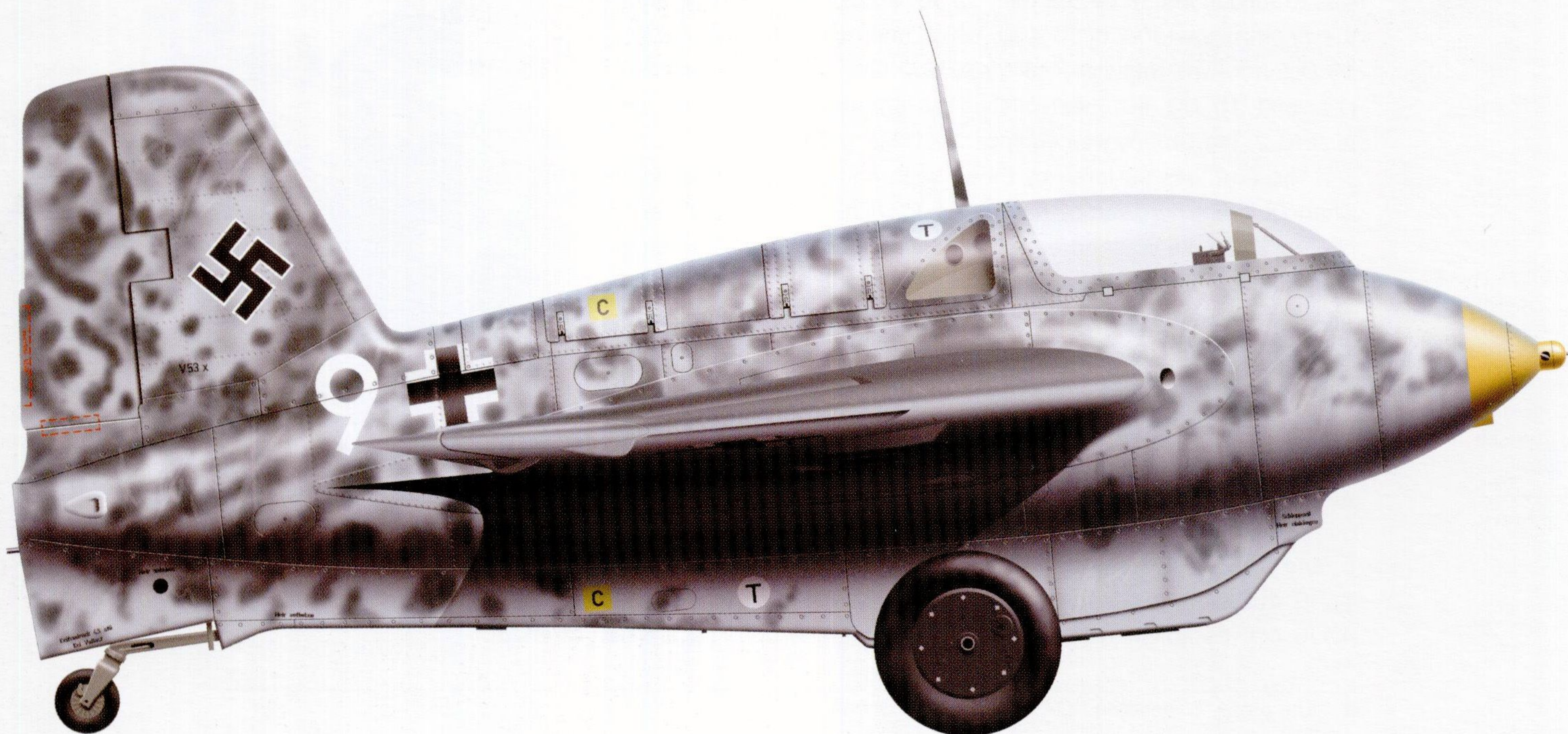
ABOVE: Four Me 163 Bs of 1./JG 400 photographed at Brandis near Leipzig between 21 August and 9 September 1944. The two aircraft in the foreground, which are still covered with temporary tarpaulins to protect them from a heavy shower, are being readied for combat.

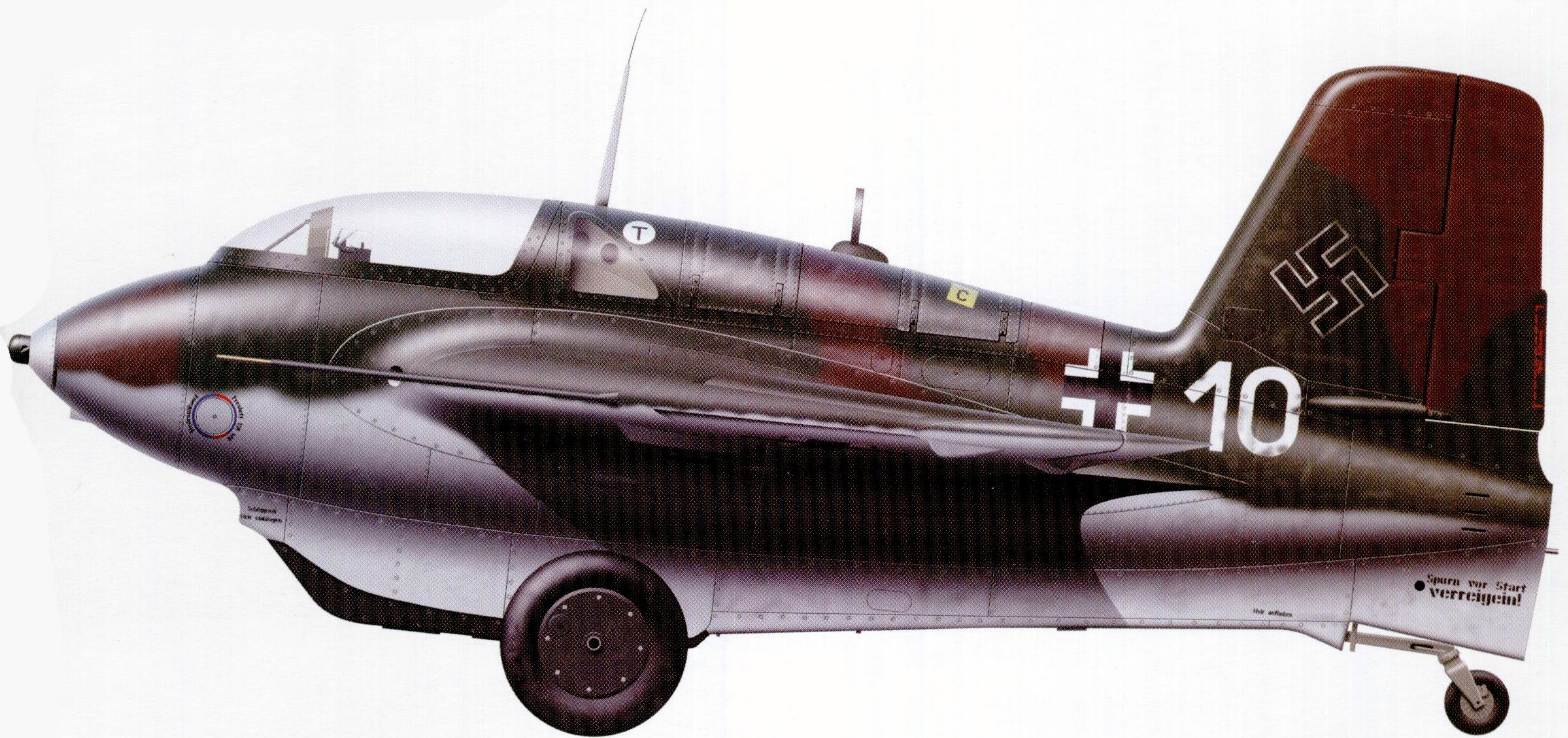


RIGHT: The Me 163 BV53 (W.Nr. 163 100 62) 'White 9' was flown by Uffz. Kurt Schiebeler of 1./JG 400 during the evening of 4 August 1944. Below the Hakenkreuz on the tail can be seen the legend 'V53 X' painted in black. The significance of the letter 'X' is unknown.

Messerschmitt Me 163 B V53 (W.Nr. 163 100 62) of 1./JG 400 at Brandis, August 1944

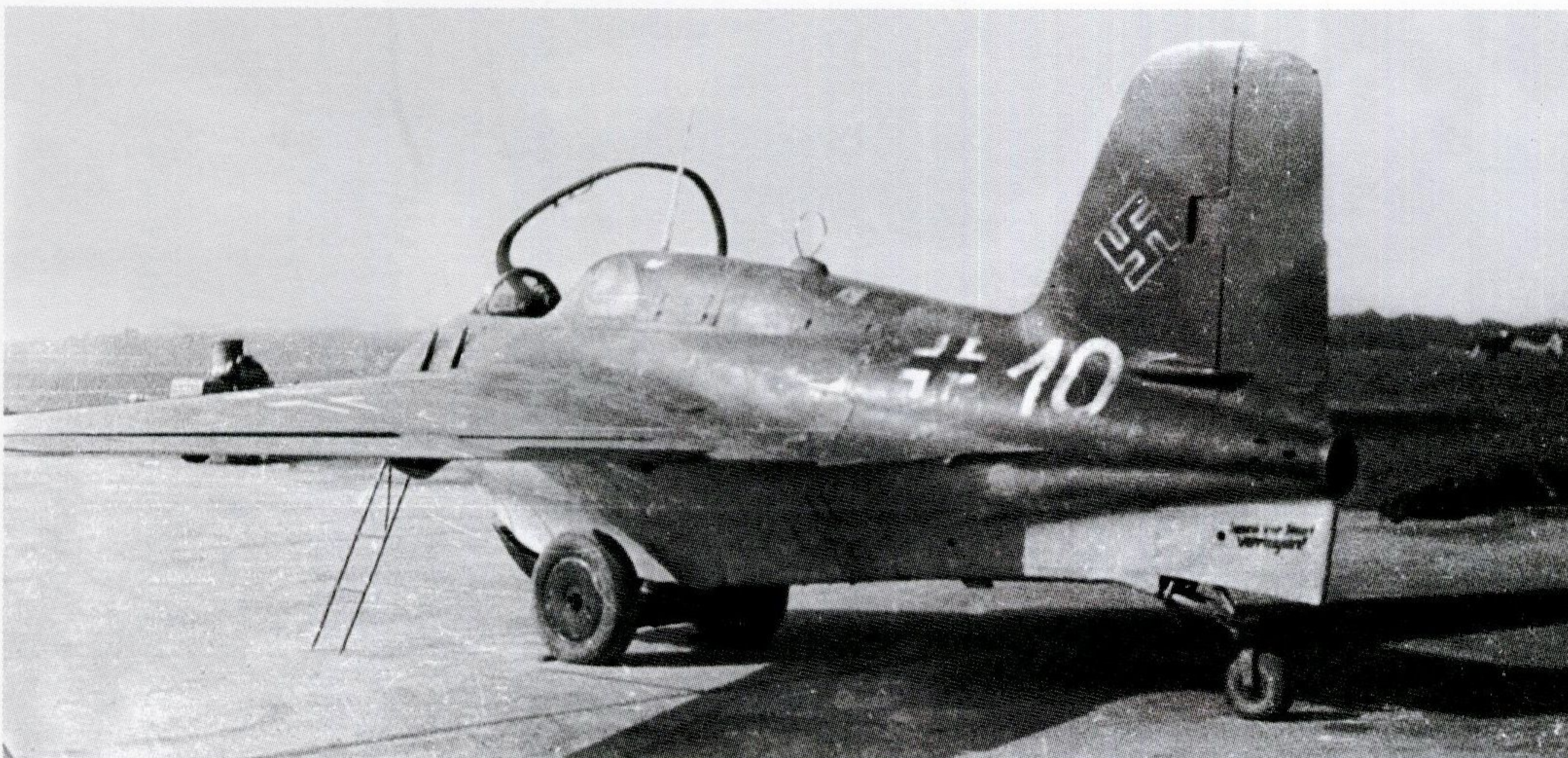
This aircraft, flown by Uffz. Kurt Schiebeler, was unusual in having the fuselage sides and vertical tail surfaces mottled in grey rather than the more usual dark greens.





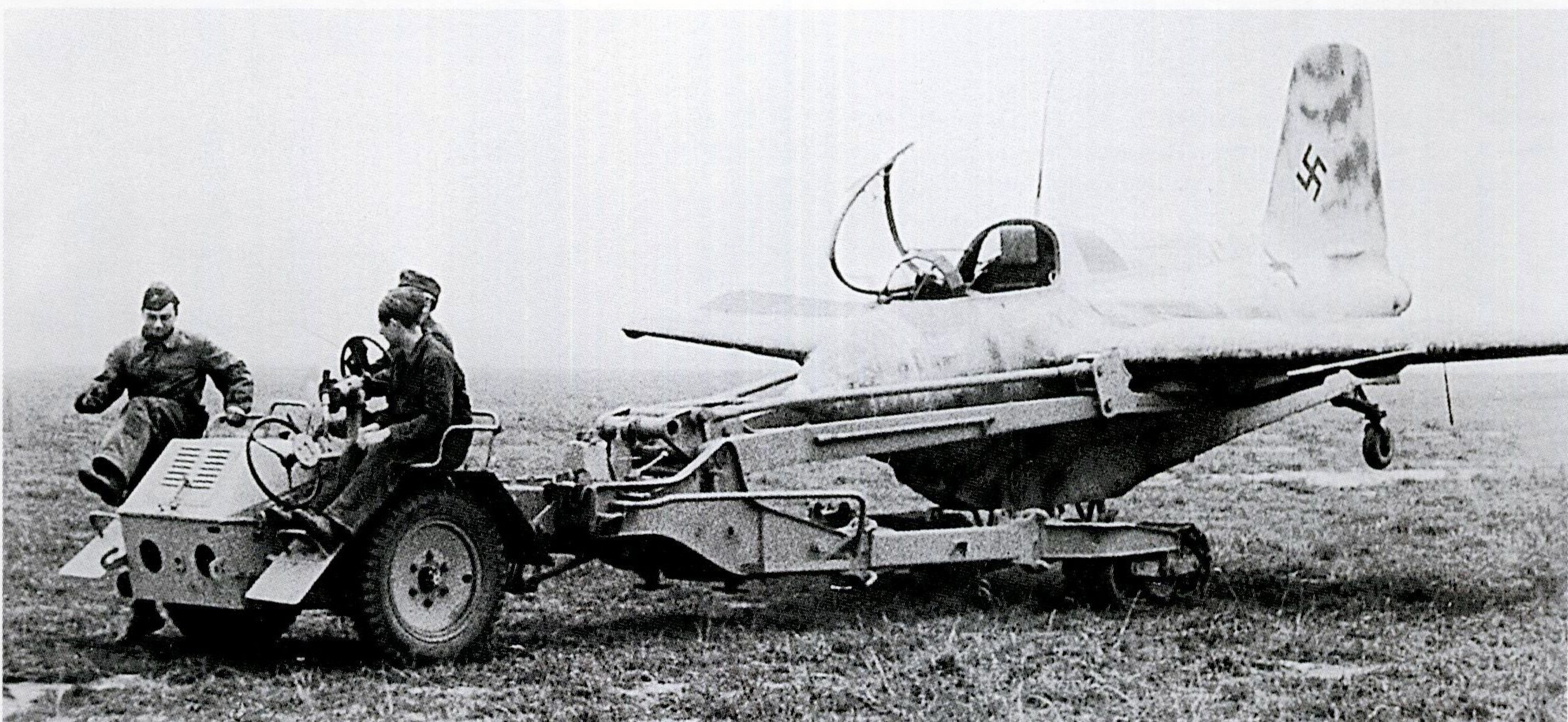
Messerschmitt Me 163 B-1a (W.Nr. unknown) of 1./JG 400 at Brandis, February 1945

Unlike the previous colour illustrations of the Me 163 included in this volume, this aircraft has plain greenish brown (RLM 81) and medium green (RLM 82) uppersurfaces with no mottling. The undersides are in pale blue (RLM 76).



LEFT: This Me 163 B 'White 10' was flown by Lt. Hans-Ludwig Löscher of 1./JG 400 at Brandis during February 1945. Löscher had begun conversion training to the Komet with 14./EJG 2 before transferring to JG 400.

RIGHT: A special hydraulically-operated unit was developed to lift the Me 163 back onto its take-off dolly after landing. Known as the Scheuch Schlepper, the device was fitted with caterpillar tracks for use on grassed runways.



1944-1945



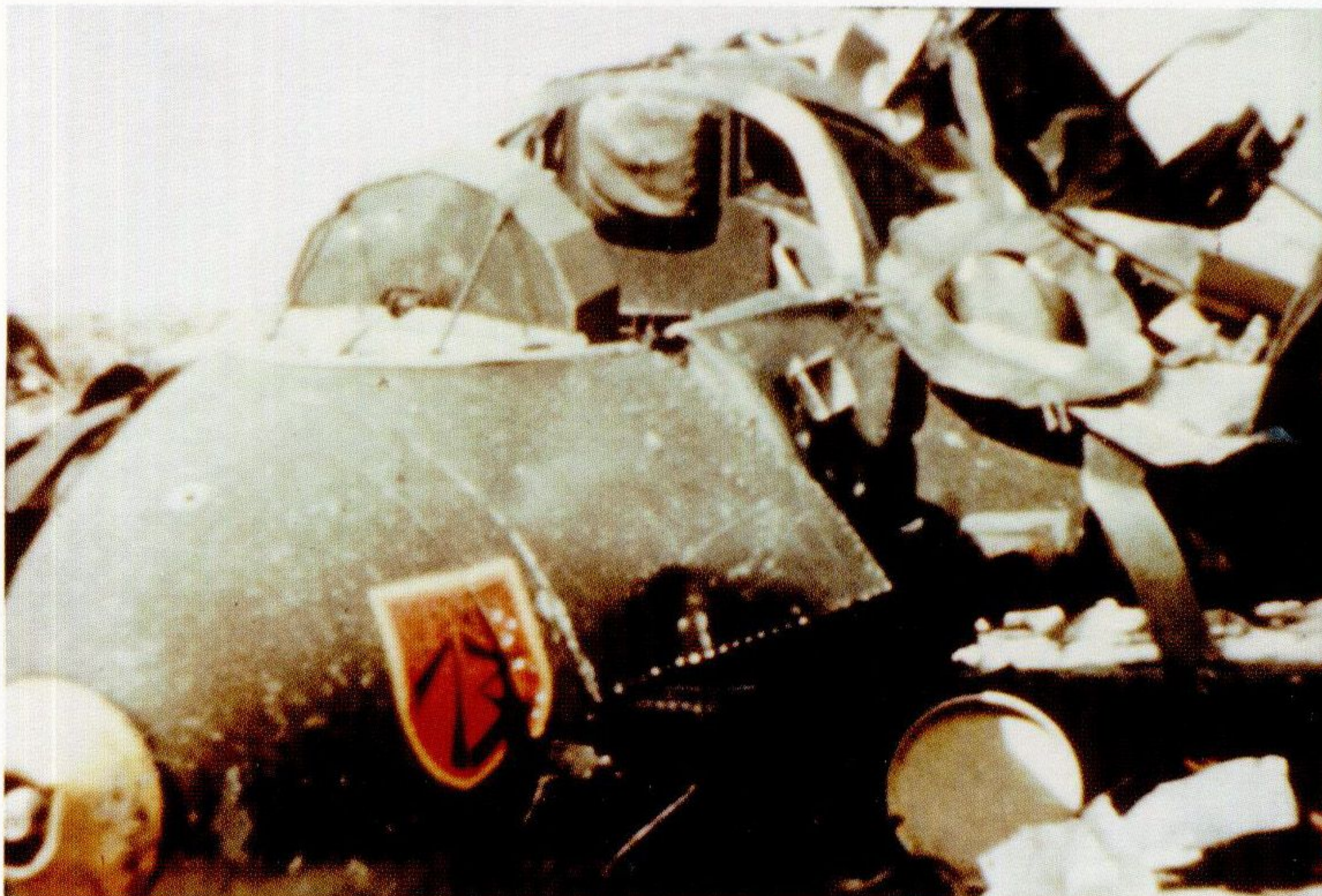
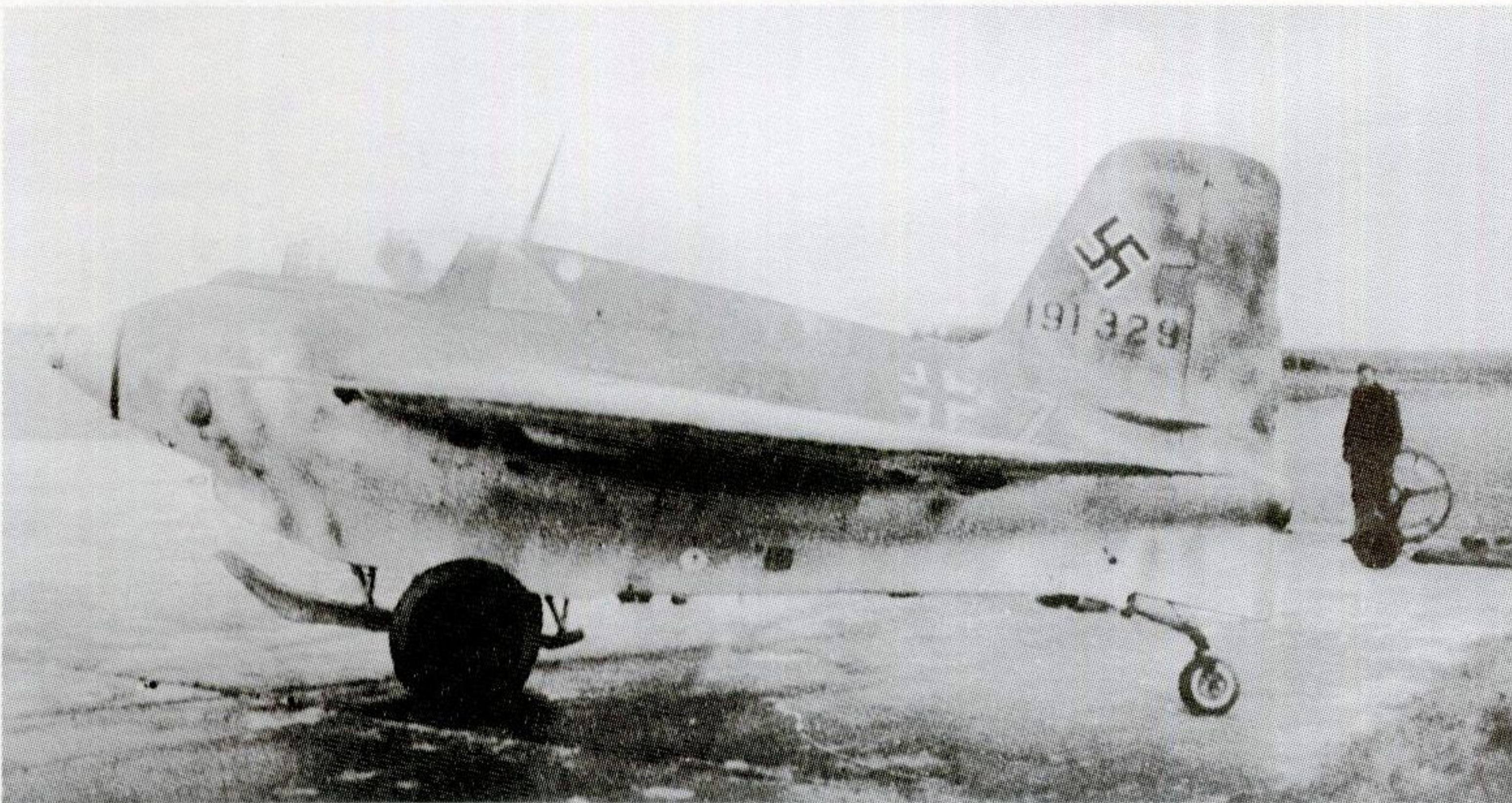
ABOVE: Ground crews manhandle a Klemm-built Me 163 B of JG 400 on to the grass taxi strip prior to take-off. Shortly after the above photograph was taken, the Me 163 exploded.



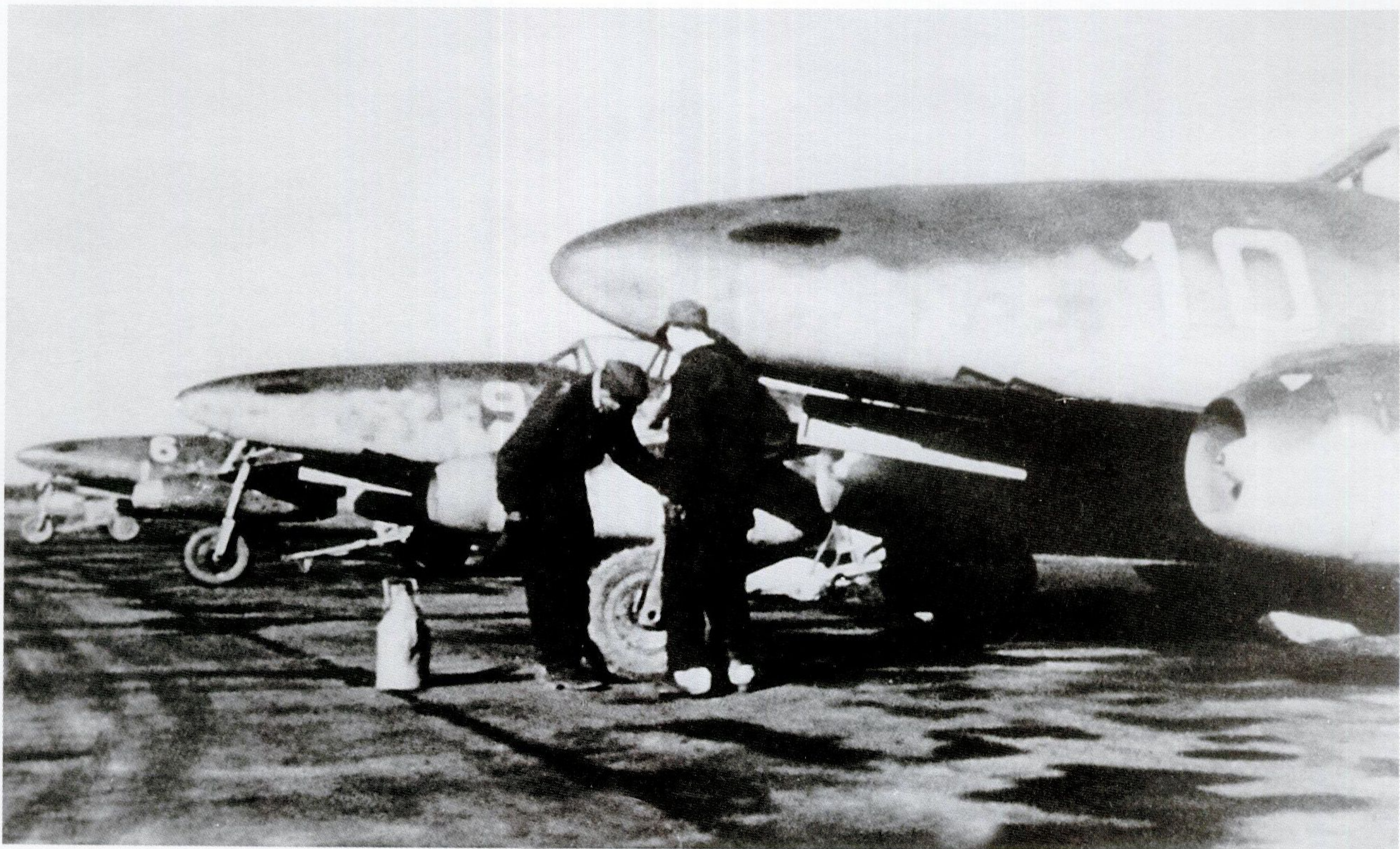
RIGHT: This photograph, of the same Me 163 as the one above, shows the devastation caused when its rocket engine exploded with a full fuel load on board. Little remained of the pilot or his aircraft.

BELOW: 'Die Schwarze 13' (the Black 13), the badge of 13./EJG 2, seen on a crashed Me 163 at the end of the war. This was also used as a superstitious emblem by several members of the unit.

BELOW: The rocket engine of an Me 163 B 'Yellow 11' (W.Nr. 191454) of 7./JG 400, is tested at Nordholz airfield. This Staffel was formed on 12 November 1944 under Lt. Reinhard Opitz who remained Kapitän until the end of the war.



RIGHT AND BELOW LEFT: Two photographs showing Me 262 A-1a, 'White 10', W.Nr. 110926 of III./EJG 2 at Lechfeld. The in-flight view shows the aircraft just after take-off and on 21 March Lt. Kurt Bell shot down a P-38 with this machine. The camouflage and markings of III./EJG 2's Me 262s was very similar to that of Erprobungs-kommando 262.



ABOVE AND LEFT: Although often mistaken for the same aircraft this Me 262 'White 10', W.Nr. 170041 was a different aircraft as can be seen by the style of numbers painted on the nose. The photograph taken on the ground shows an instructor standing on the wing while he talks the trainee pilot through the starting procedure. The mechanic in front the engine is in the process of pulling the starter cord handle of the petrol driven Riedel motor which in turn was used to start the turbine blades of the Jumo 004.

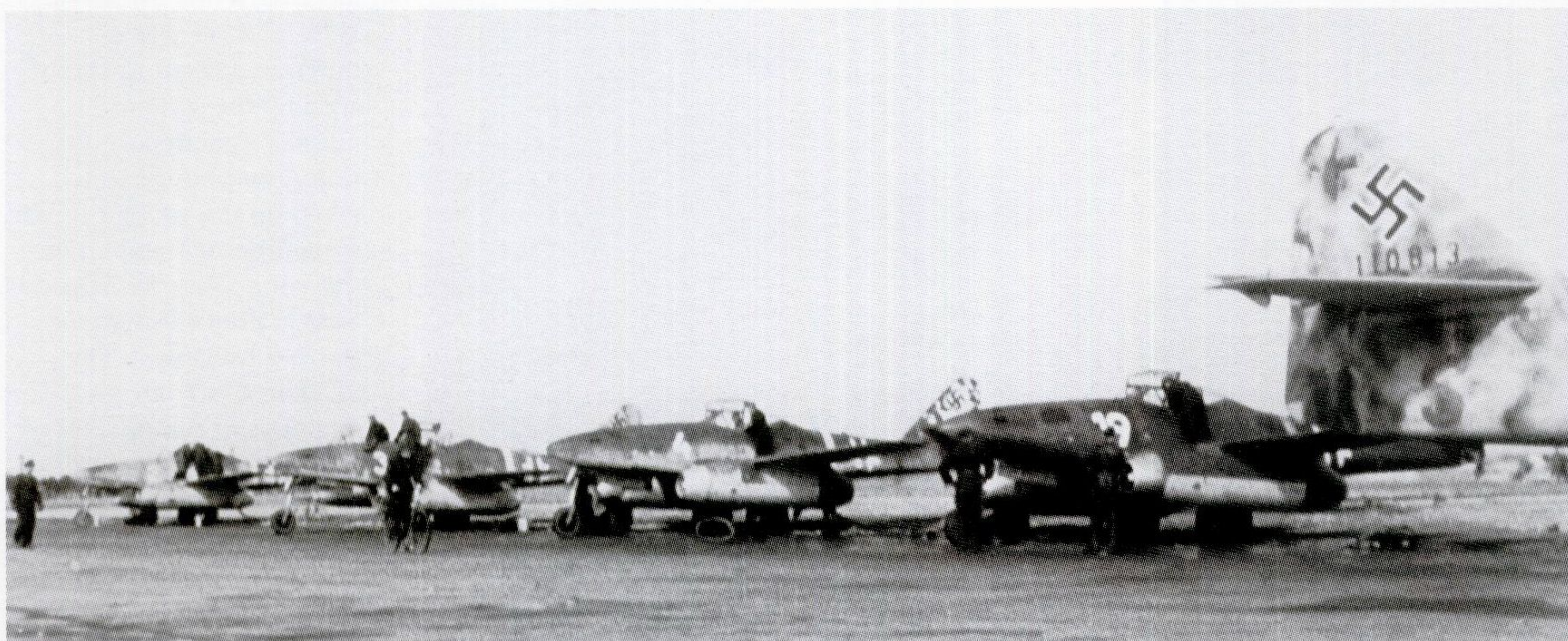
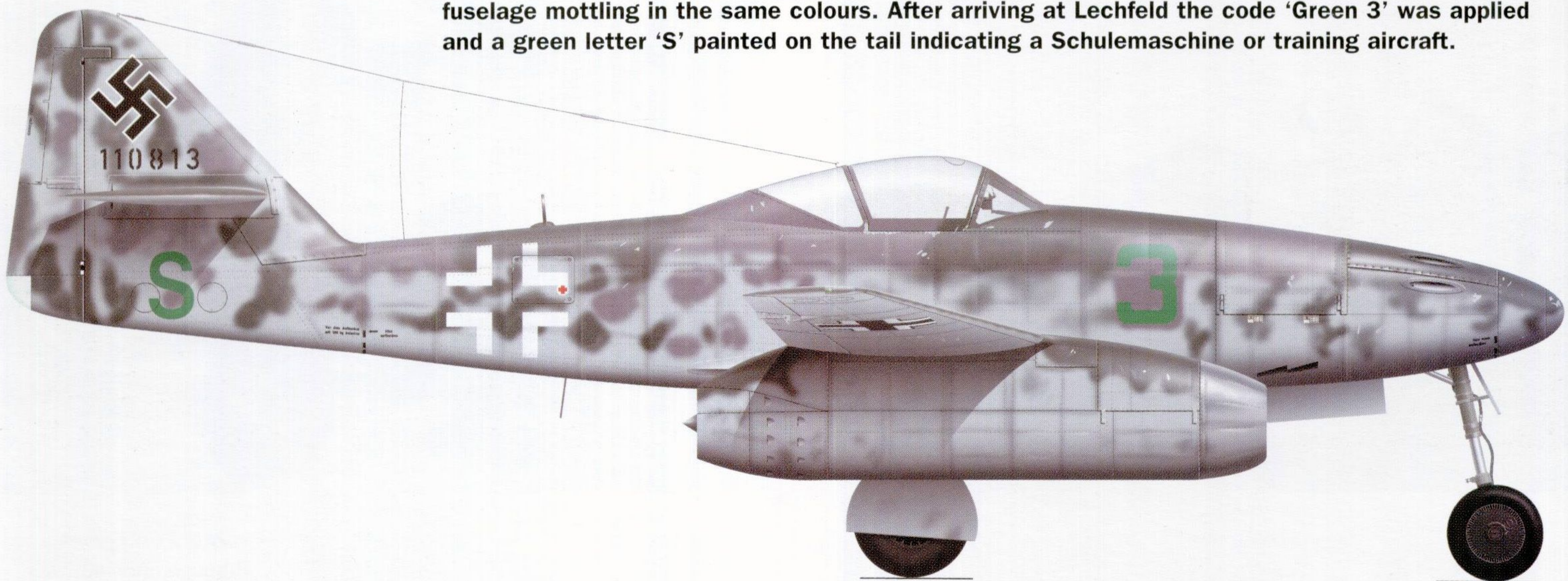
1944-1945

RIGHT: This Me 262 A-1a was built in December 1944 at Leipheim and test flown at Memmingen shortly afterwards. For a short time in January 1945 it was fitted with pylons for bomb dropping trials, but these were removed shortly afterwards and the aircraft were sent to III./EJG 2. It may have later been transferred to I./JG 7 at Kaltenkirchen.



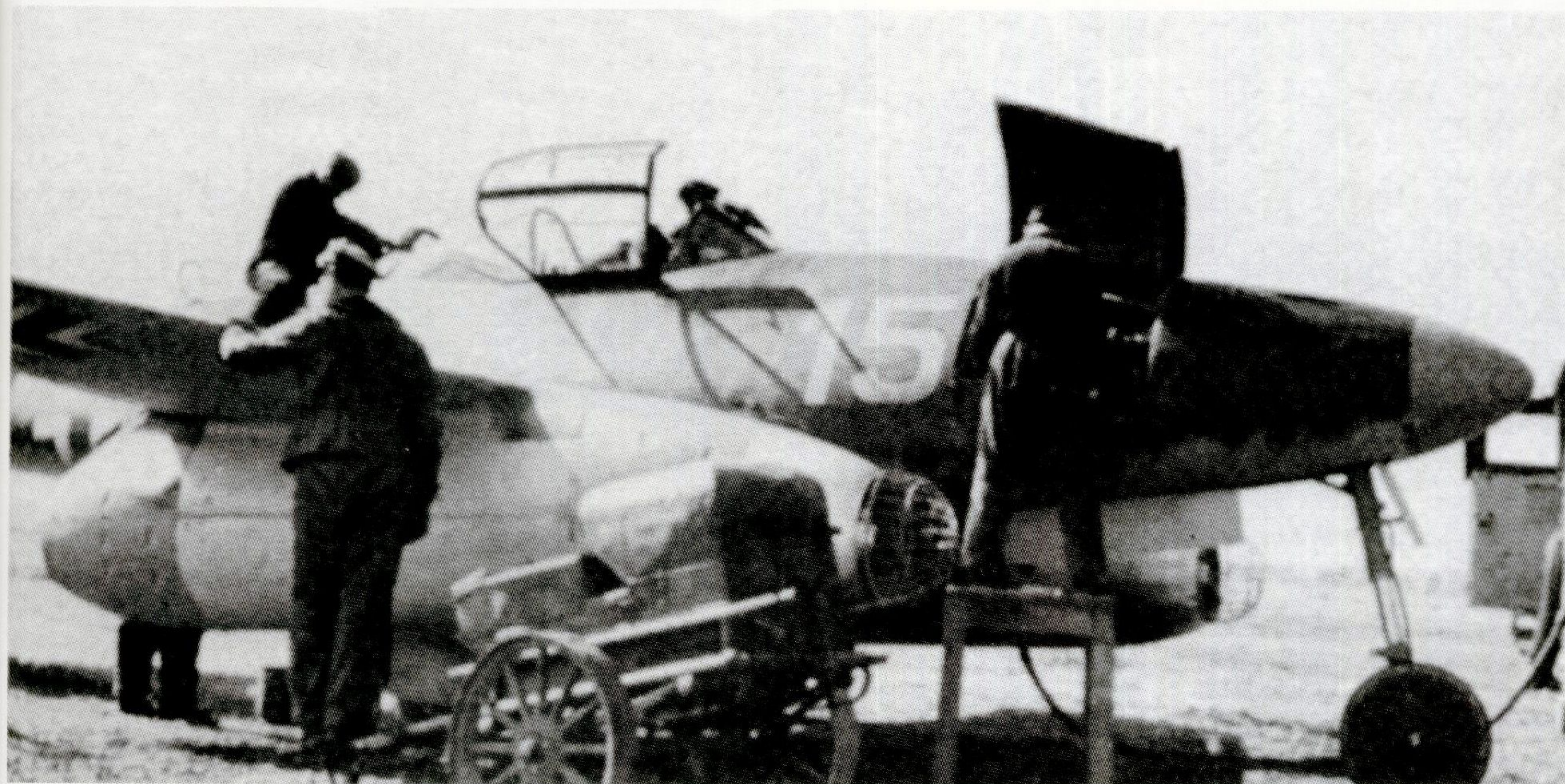
Messerschmitt Me 262 A-1a (W.Nr. 110813) of III./EJG 2 at Lechfeld, January 1945

This machine had dark green (possibly RLM 71) and medium grey (RLM 75) upper surfaces with fuselage mottling in the same colours. After arriving at Lechfeld the code 'Green 3' was applied and a green letter 'S' painted on the tail indicating a Schulemaschine or training aircraft.

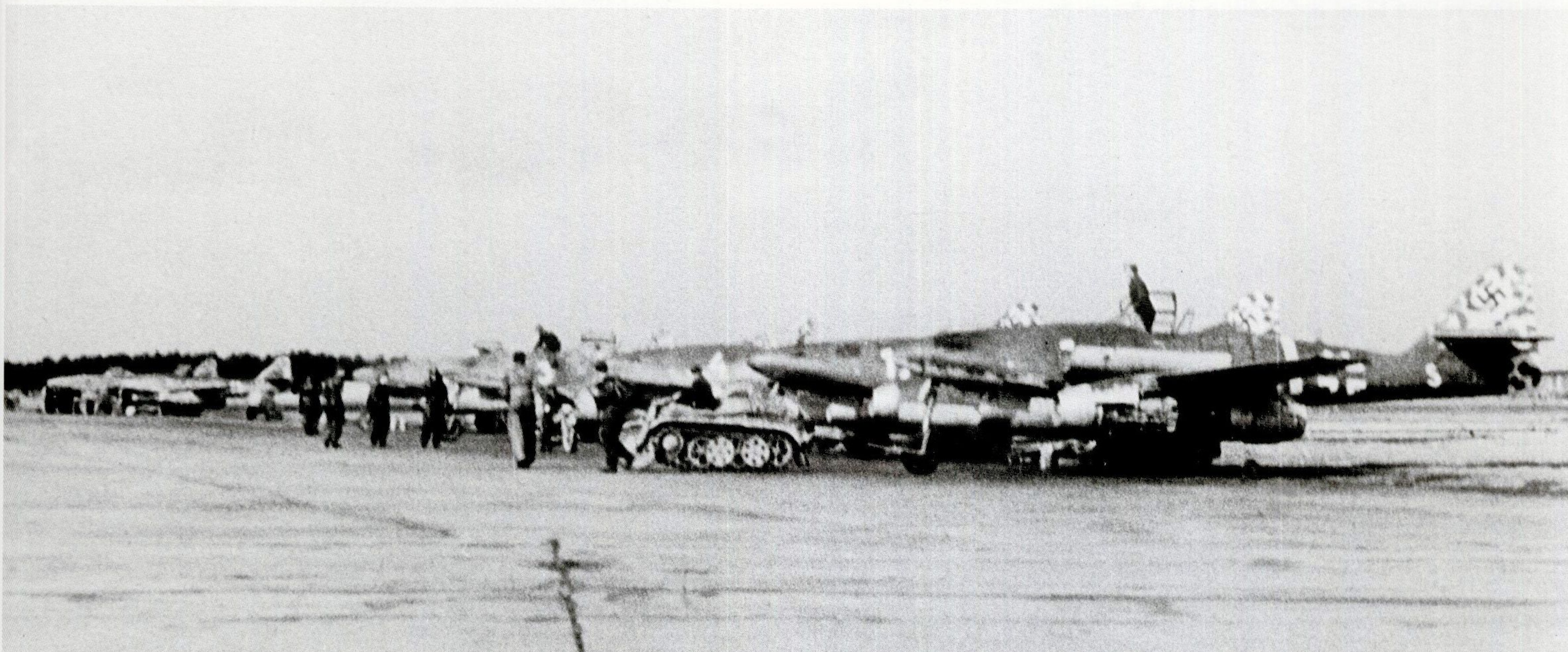


LEFT: 'Green 3' (W.Nr. 110813) of Erprobungskommando 262 taxis past four other Me 262s. The aircraft of Kommando Nowotny would have carried very similar markings with white numbers on the forward fuselages and yellow rear fuselage bands.

1944-1945



LEFT: A hive of activity as ground crews prepare an Me 262 A-1a, 'White 15' for combat. To the right of the picture, an armourer is checking the four 30 mm MK 108 cannon.

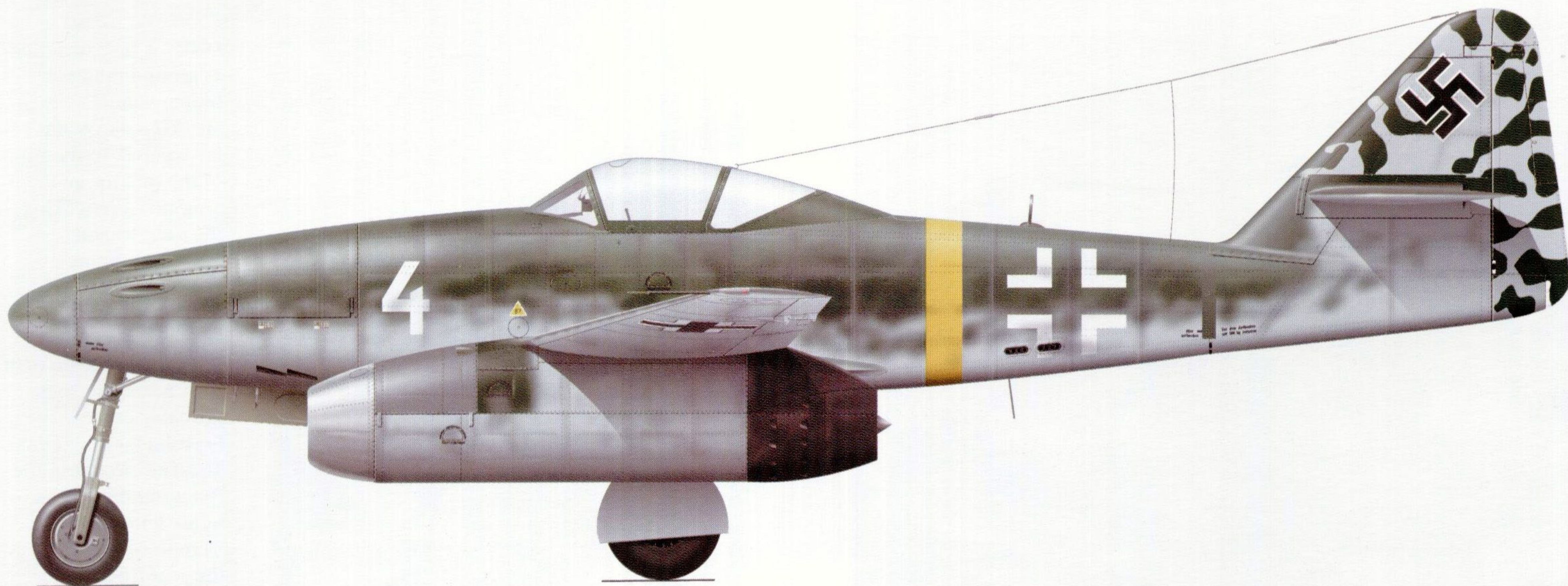


BELOW: A line-up of at least seven Me 262s probably of Erprobungskommando 262. The aircraft in the foreground carries a white letter 'S' (for 'Schule' or training) on the rear fuselage indicating that it had probably suffered some mishap and was not to be flown in combat.

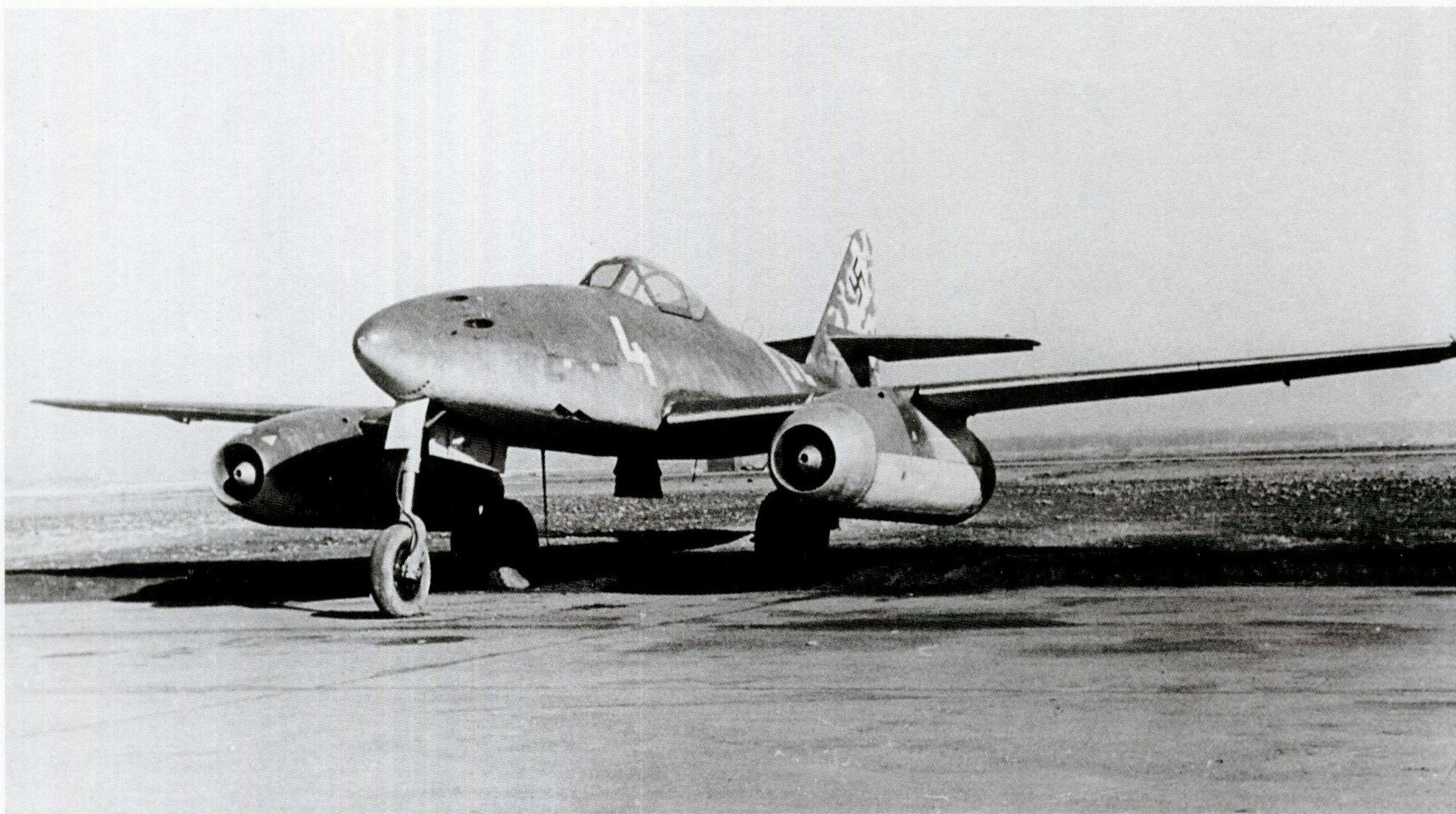


LEFT: 'White 16', an Me 262 of 10./EJG 2 landing at Lechfeld. The aircraft of this unit continued to carry similar markings as those introduced by Erprobungskommando 262 and Kommando Nowotny.

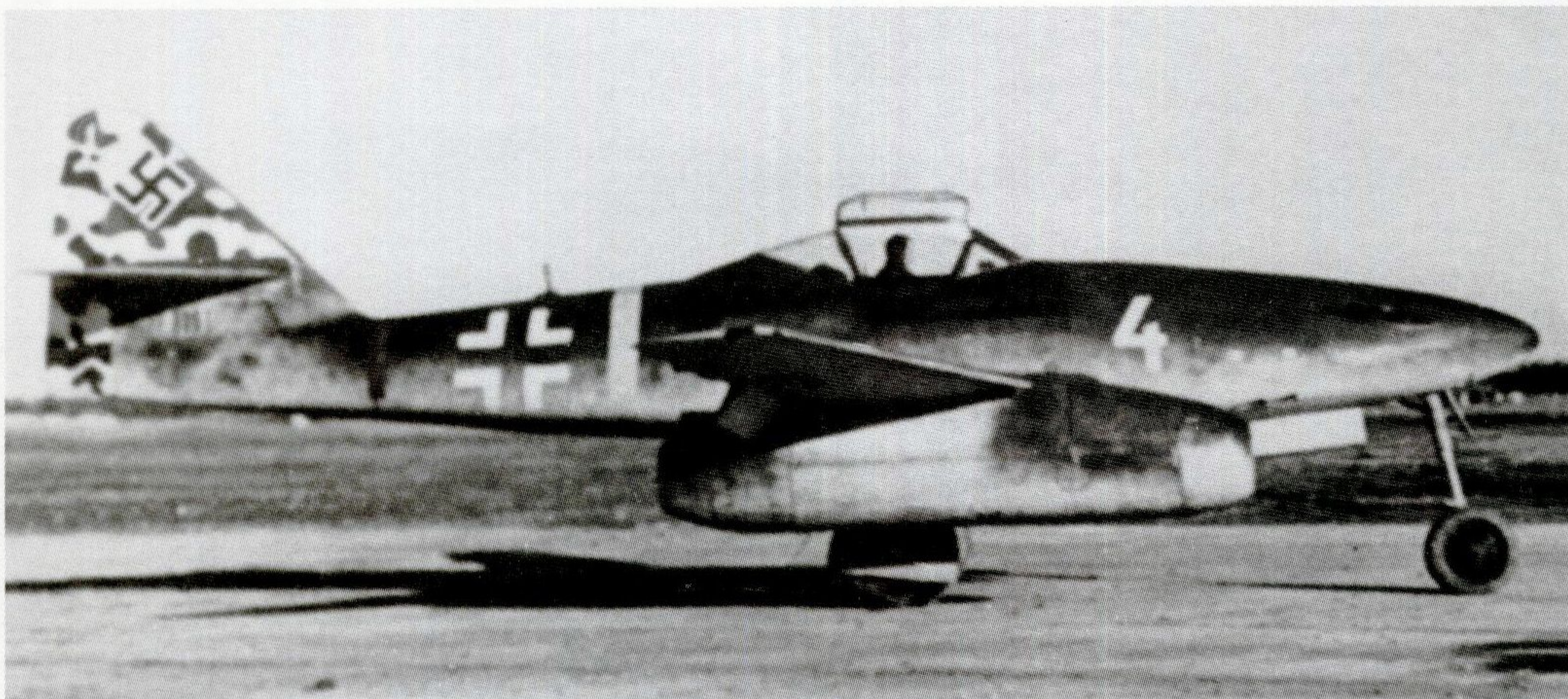
1944-1945

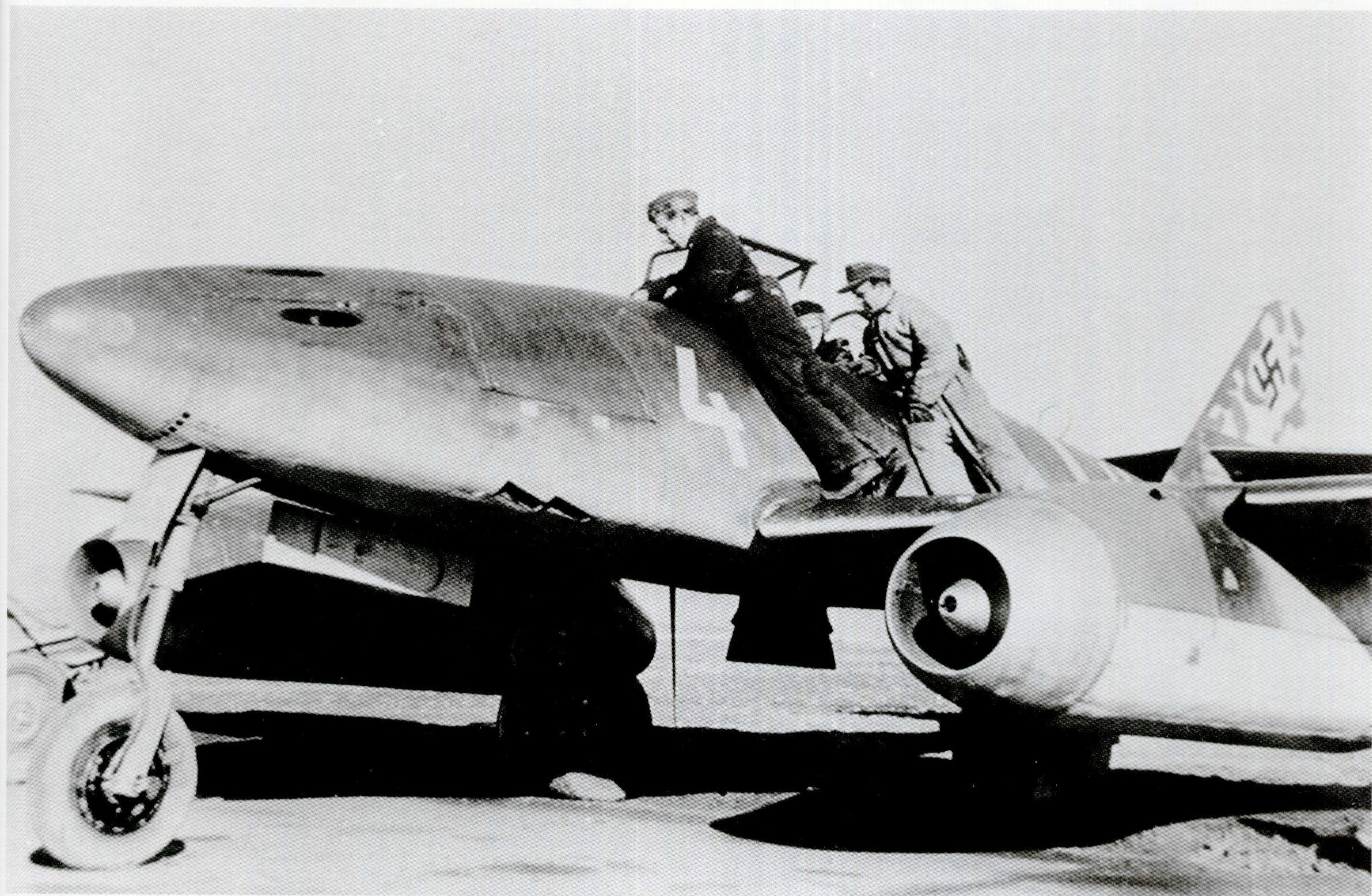


Messerschmitt Me 262 A-1a (W.Nr. unknown) of Kommando Nowotny at Achmer, October 1944
Possibly operated by Kommando Nowotny, this Me 262 has its uppersurfaces painted in two dark greens with an unusual 'spotted' mottling on the vertical tail surfaces. Both this unit and Erprobungskommando 262's aircraft carried a narrow yellow band around the rear fuselage.



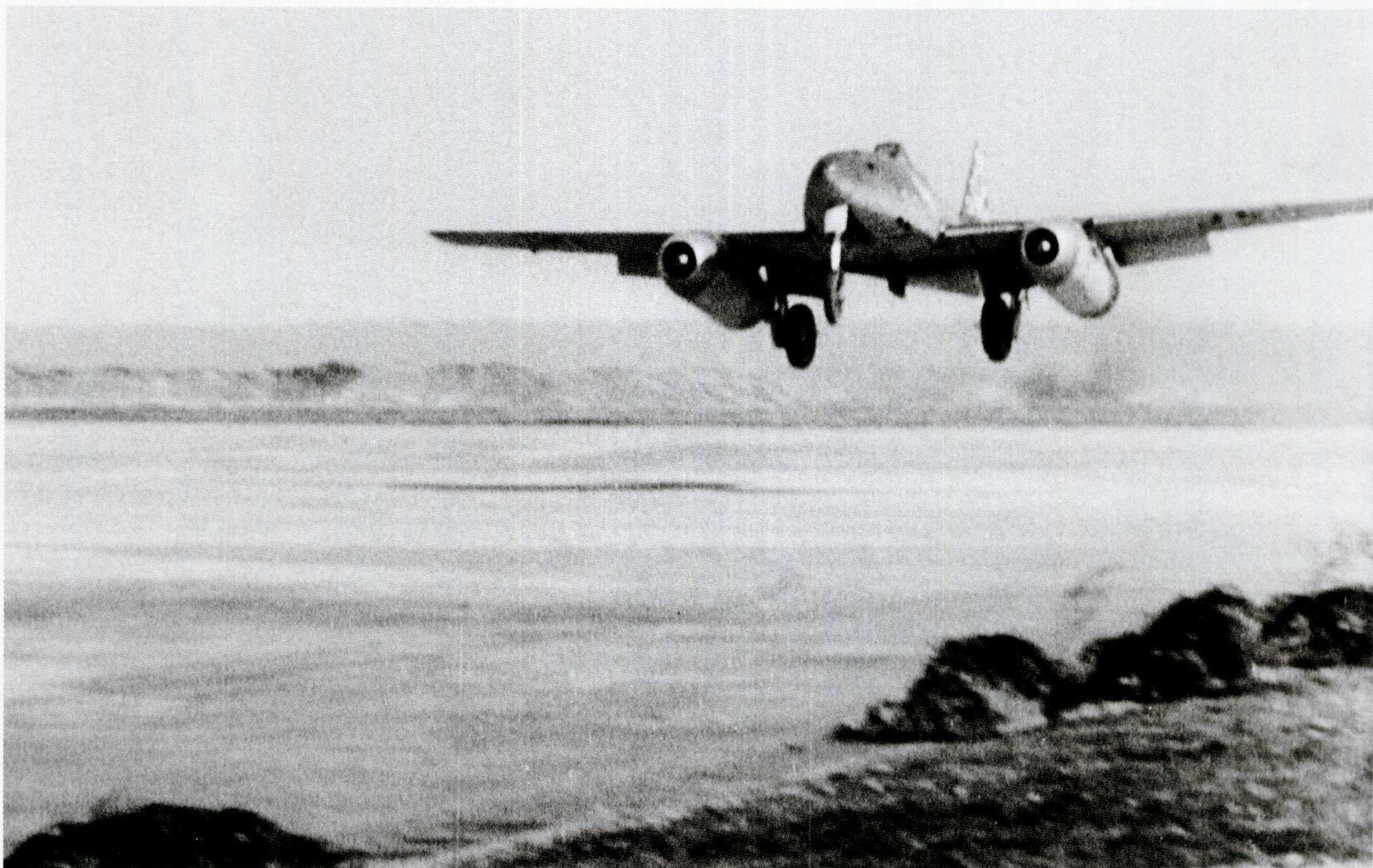
RIGHT AND BELOW:
Two photographs of 'White 4', an Me 262 A-1a of Kommando Nowotny. The forward section of the port engine cowlings of this aircraft has been changed and is still in its natural metal finish.





ABOVE: Ground crews prepare 'White 4' for an operational sortie. Easily identifiable in this photograph are the four 30 mm MK 108 gun ports and, on the underside of the fuselage, the shell ejection chutes for these weapons. Many problems were experienced with the jamming of this gun due to its lightweight construction. It was particularly vulnerable to this problem when executing tight turns because of the high G-forces encountered.

RIGHT: 'White 4' of Kommando Nowotny about to touch down following a sortie. It is interesting to note that slightly more problems were experienced with the tricycle undercarriage of this revolutionary aircraft than with the turbojets.



The Volksjäger

"From the beginning I had strongly opposed the Volksjäger project. In contrast to the creators of this idea, my objections were based on factual reasons such as insufficient performance, range, armament, poor visibility, and dubious air worthiness. Furthermore, I was convinced that this aircraft could not be brought into worthwhile operation before the end of the war. The terrific expenditure of labour and material was bound to be at the expense of the Me 262. To my mind, all resources ought to have been concentrated on this well-tested fighter in order to make the best of the possibilities remaining to us. If we scattered our strength once more in the last phase of the war, then all our efforts would be in vain."

Adolf Galland, General der Jagdflieger

The complexity of the Me 262, which required a fairly high level of skilled labour for its manufacture, meant that production of the aircraft was relatively slow. By 10 August 1944, for example, only 122 had been completed. By this time, Allied air superiority, the reduced training period for *Luftwaffe* fighter pilots, and the poor reliability of the turbojet engines then available, meant that a long service life was not expected for jet aircraft. It was calculated that an Me 262 would be a total loss after five to ten combat missions. In addition, the Me 262 required two turbojet engines, and correspondingly more fuel, the supply of which was growing extremely scarce due to Germany's rapidly deteriorating military position.

Thus, the concept of a single-engined turbojet-propelled fighter of about half the size and weight of the Me 262, but with a similar performance, became increasingly attractive.

On 10 September, *Obstlt.* Siegfried Knemeyer of the RLM placed a specification for a *Volksjäger* (People's Fighter) a cheaply produced, lightweight fighter powered by a single BMW 003 A turbojet. The requirement called for a maximum speed of 750 km/h (470 mph) at sea level, a takeoff distance of not more than 500 metres (1,600 ft), the ability to operate from poor airfields, and an endurance of at least 30 minutes at sea level at 100 per cent thrust. The proposed fighter was to have an armament of two 30 mm MK 108 or two 20 mm MG 151/20 cannon. As far as practical, wood and steel were to be employed in the fighter's construction. Perhaps the most demanding stipulation was that the competing proposals should be ready for examination by the Fighter Aircraft Development Group of the RLM within five days!

As early as July 1944, Heinkel had initiated a series of studies, under the designation P.1073, for a high-performance jet fighter with swept wings powered by twin turbojets. In August, Heinkel were advised by the RLM that a single-engined configuration was essential on account of the saving in production effort and a probable shortage of power plants. As the entire Jumo 004 production output was reserved for the Me 262 and Ar 234 B, the only other turbojet readily available for installation in any new fighter was the BMW 003.

Following Knemeyer's request, Heinkel produced a derivative of the P.1073 powered by a single dorsally-mounted BMW 003. This proposal, the P.1073-18, was a scaled-down version of the earlier project to accommodate the smaller and less powerful BMW turbojet, combined with an unswept wing and twin fins and rudders.

Although a Blohm und Voss proposal was initially preferred, Knemeyer formally announced the Heinkel project as the winner of the *Volksjäger* competition on 30 September. For reasons of prestige, Heinkel had requested the designation 'He 500', but in October the RLM allocated the defunct type number 8-162 to the aircraft.

Despite considerable criticism from leading personalities within the German aircraft industry and the *Luftwaffe*, the *Volksjäger* programme was rushed through. Göring himself became infected with the idea, commenting: "*Hundreds! Thousands! Umpteen thousands! Until the enemy has been chased back beyond the borders of Germany.*"

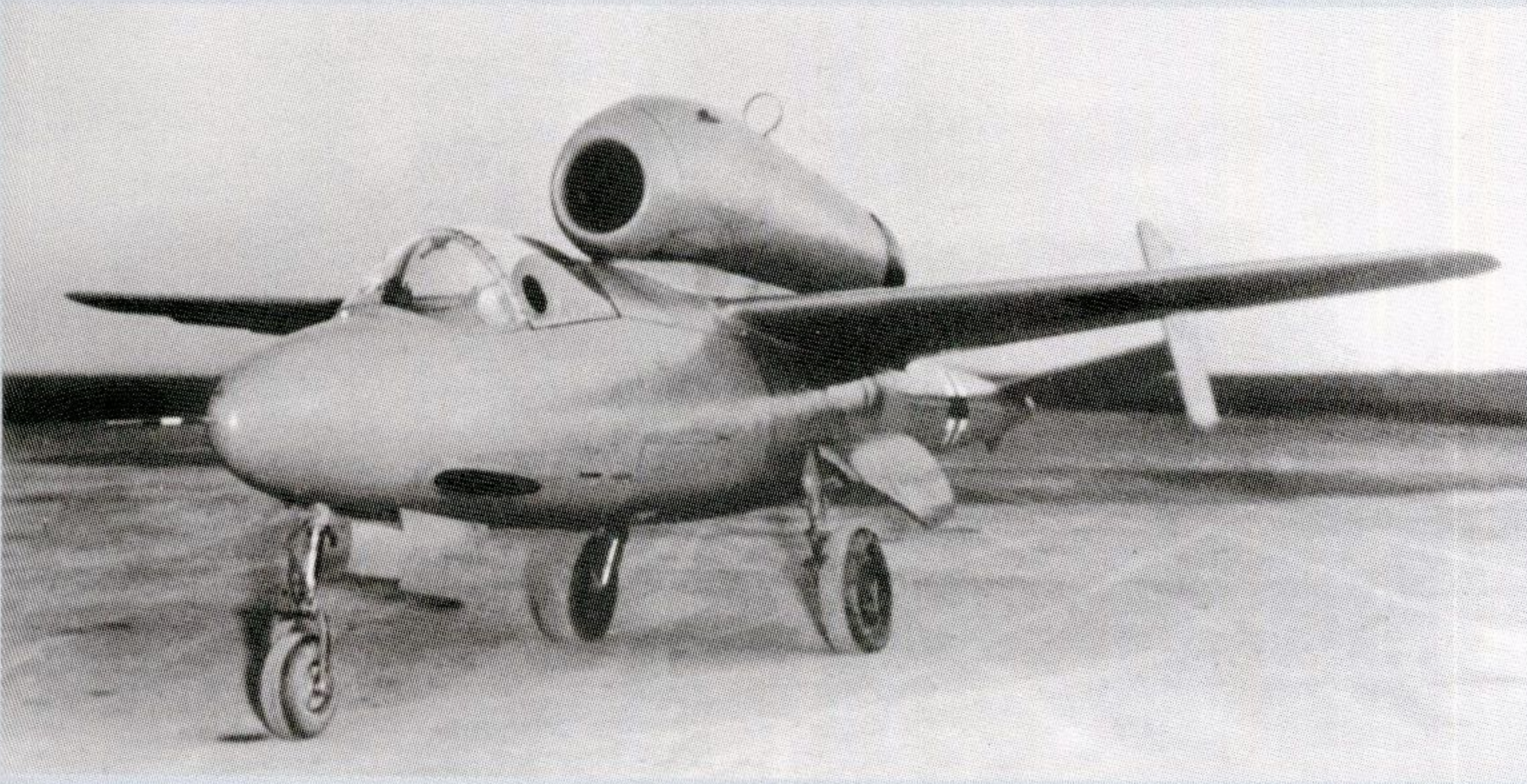
At the end of September 1944, the provisional He 162 mock-up was cleared by the RLM and the Armaments Ministry



ABOVE: Prior to the Second World War, Siegfried Knemeyer was a gifted civilian test pilot and instructor who was greatly respected for his work on instrument flying. In 1939 he joined the *Luftwaffe* as a *Flieger* (aircraftsman) and served during the Polish campaign as personal pilot to Generaloberst von Brauchitsch, the C-in-C of the German Army. In January 1940 he joined Theodor Rowehl's clandestine reconnaissance unit, the *Aufklärungsgruppe Ob.d.L.*, and flew a variety of advanced, high-altitude aircraft. In April 1943 he was appointed Technical Officer to General Dietrich Peltz when he was acting as *Angriffsführer* England, and became electronics advisor on Göring's personal staff in July. This gave him the opportunity to persuade the *Reichsmarschall* to give increased priority to the Me 262. In November 1943 he was promoted to *Oberstleutnant*, becoming *Chef GL/C-E* (Chief of Development) under the *Generalluftzeugmeister*, Erhard Milch. With the break up of his department in August 1944, he became the *Chef TLR/Fl.E.* (Head of Aircraft Development with the Chief of Technical Air Armament) and was largely responsible for the development of the He 162 *Volksjäger*.

BELOW: Shortly after production of the He 162 commenced at Heinkel's parent factories, sub-contracting of the fighter began at Junkers' Bernburg plant. This photograph shows the first Junkers-built aircraft (W.Nr. 300001) following its initial flight on 25 January 1945. All Junkers built aircraft had serial numbers in the 300000 series.



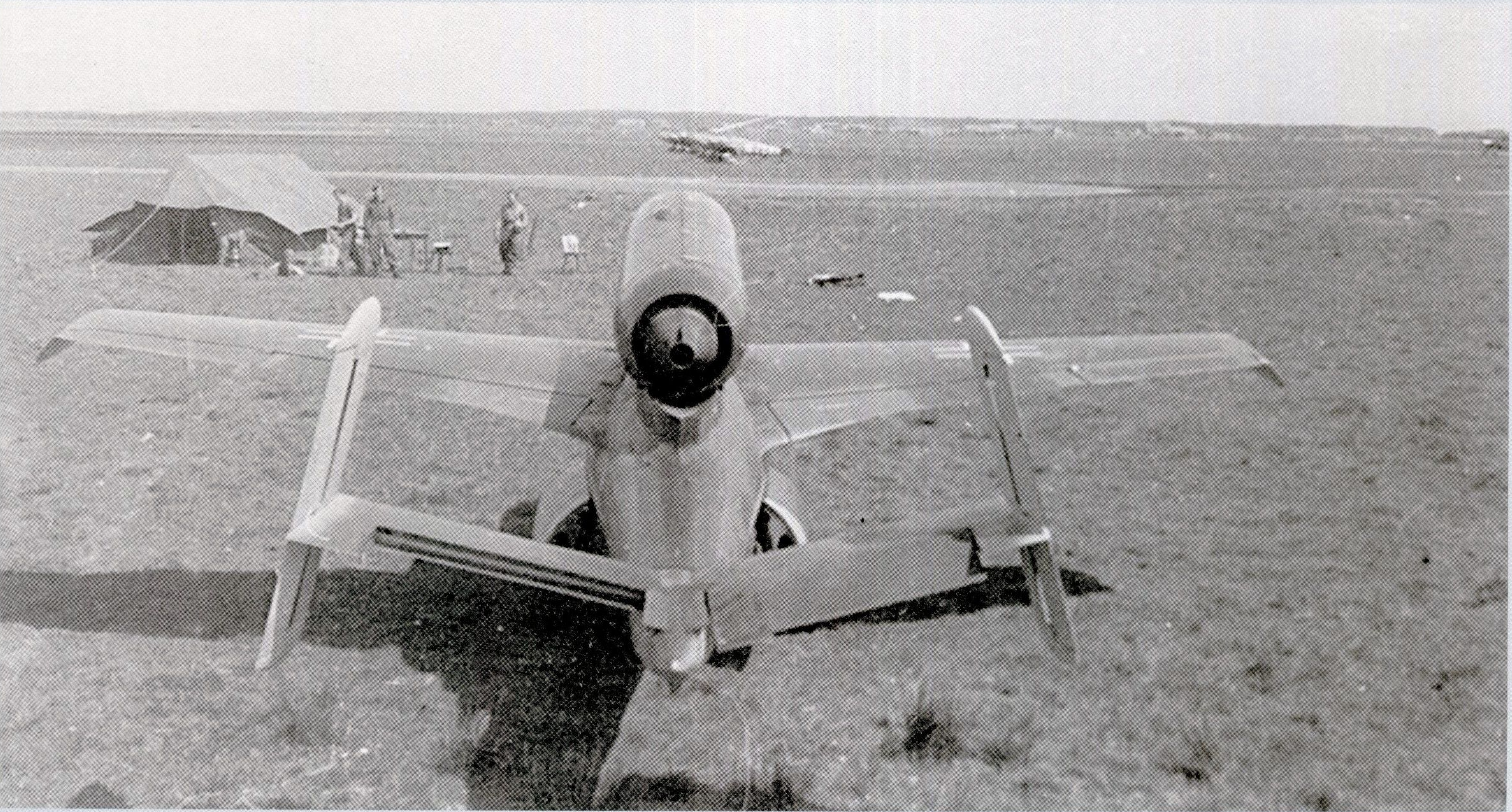


ABOVE: The He 162 V1 made its first flight on 6 December 1944 piloted by Flugkapitän Gotthold Peter. This flight was successful, but a second flown four days later before high-ranking officials, ended in disaster when the port wing disintegrated and the aircraft crashed, killing the pilot. The event was captured on film.



ABOVE: Photographed in April 1945 shortly after its capture by American troops this converted salt mine located at Eger, near Salzburg, was used for He 162 production. At least 40 fuselages can be seen in various stages of completion.

BELOW: This rear view of an He 162 gives an excellent impression of the rather unusual design of the aircraft. The single 800 kg (1760 lbs) thrust BMW 003 turbojet was mounted above the fuselage exhausting between the twin fins and rudders.



then gave orders for the mass production of the aircraft to commence without waiting for the result of flight trials. Preparations for the start of series manufacture began on 1 October with prototype drawings being issued to the experimental workshops at Vienna-Heidfeld on 15 October. On 5 November the production drawings, which amounted to approximately 1,000, were completed, and series production of He 162 components commenced. The prototype He 162 V1 was completed on 1 December and flew five days later, a mere 73 days after the authorization of the *Volksjäger* programme. This feat was only exceeded by the Miles M.20, a much simpler fighter, which was flown 65 days after it was ordered.

The He 162 V1 was flown by *Flugkapitän* Gotthold Peter, Heinkel's Chief Test Pilot, who reported that the engine ran 'beautifully', but that there was a tendency for the aircraft to turn to port. Four days later, on 10 December, the prototype was demonstrated before a large gathering of RLM officials. In order to impress the important personages assembled below, Peter attempted an unscheduled low-level, high-speed run over the airfield. At an estimated speed of 735 km/h (460 mph) the leading edge of the starboard wing ripped away, causing the aircraft to go into a roll, which broke away the aileron and wing tip. At this altitude, Peter was unable to bale out and the aircraft was destroyed.

Subsequent investigation of the accident revealed that it had been caused by instability around the aircraft's lateral axis combined with defective glue bonding of the wooden components. Despite this problem it was decided to let preparations for mass production proceed as planned. Political



ABOVE: Because of the somewhat tricky handling characteristics of the He 162, this sight was not uncommon. This aircraft (W.Nr. 120029) made a wheels-up landing following a training flight and broke its back.

By the end of the war, about 150 *Volksjäger* had been delivered, with around 100 more awaiting flight testing and delivery and a further 800 in varying stages of completion. In spite of all the frantic effort during the last months of the war, only one *Jagdgeschwader* - JG 1 - commenced conversion to the He 162, and this unit's re-equipment was never fully completed.



ABOVE: At the end of the war, the He 162 M20 (W.Nr. 200003) was discovered by American troops at München-Riem. The legend 'M20' painted on the nose in black indicated that this was the twentieth prototype. 'M' (Muster, or model) numbers were used to identify He 162 prototypes rather than the better known 'V' (Versuchs, or experimental) numbers. This aircraft was built at Heinkel's Hinterbrühl plant near Vienna.



LEFT: The He 162 M23 (W.Nr. 200006) carried the call sign VI+IP painted in black over the aircraft's overall primer finish. This aircraft was fitted with redesigned wingroot fillets in an attempt to improve the He 162's low-speed flight characteristics.

Combat Operations December 1944-February 1945

"The first problem of conversion to the Me 262 was that of greater speed. The Me 262 cruised two to three times faster than the Ju 88 or He 111. Also we only had single-seat Me 262s available, no two-seaters. Pilots used to slower aircraft found that the Me 262 could run away with them and it was easy to get lost. Also the type had a much higher take-off speed than anything the bomber pilots had previously experienced. If they tried to lift the nose too early, before it had reached flying speed, it was easy to stall the aircraft on the runway."

Major Hans-Georg Bätcher Geschwader Kommodore of KG(J) 54, February 1945

After suffering disastrous losses in an attempted renewal of the bombing offensive on the British Isles in the early months of 1944, the remaining pilots of General Dietrich Peltz's IX. Fliegerkorps were withdrawn from operations. Peltz then suggested that these men be retrained on the Me 262. His reasoning was that their navigational skills would render them invaluable in such a role. Göring immediately enthused over the idea despite the objections of many fighter leaders, especially Adolf Galland.

The first of Peltz's units to transfer to fighter operations was KG 54, the *Totenkopf* (Death's Head) *Geschwader*. From late August 1944 its remaining operational *Gruppen*, I. and III./KG 54, were withdrawn to Giebelstadt and Neuburg-am-Donau respectively to begin retraining on the jet fighter.

On 1 October the *Geschwader* was given the new designation KG(J) 54. Owing to the slow production of the jet fighter, only one Me 262 was initially available to the *Gruppe*, the pilots being forced to make use of six Fw 190s to help conversion training. Conversion was further hindered by a bombing attack on Giebelstadt on 3 October, and on the 14th the first aircraft loss was suffered when *Ofw.* Kurt Schwarz was killed flying a Fw 190 A-8. By 20 October, KG(J) 54 had received ten more Fw 190 F-8s for training. On the same day the training *Gruppe*, IV.(Erg)/KG 54, was redesignated II./KG(J) 54 but it was not until 9 December that it began instruction at Lechfeld on the Me 262. On the same day, *Hptm.* Helmut Kornagel of 7./KG(J) 54 reported making an attack on heavy bombers near Ingolstadt, but he was driven off by the fighter escort. Next day *Obt.* Benno Weiss of 2./KG(J) 54 was killed when his Me 262 crashed at Fahrenbach/Baden following a high-altitude training flight.

Galland appointed *Oberst* Johannes Steinhoff *Kommodore* of JG 7 on 1 December. III. *Gruppe* had now begun a period of intensive pilot training at Lechfeld. Its missions included intercepting American bombers and Allied reconnaissance aircraft over Bavaria. One such sortie took place on the 2nd when a Me 262 flown by *Lt.* Weber shot up an F-5 surveillance aircraft north of München before he was driven off by an escorting P-51. Weber claimed the F-5 as his fifth jet victory. Next day *Ofw.* August Lübking of the same *Gruppe* claimed the destruction of a B-17, but on 6 December *Uffz.* Friedrich Renner of 10./JG 7 was killed when his aircraft crashed during a transfer flight near Osnabrück, possibly shot down by Allied fighters. From this day bad weather closed in, preventing further training by III./JG 7 until 20 December.



ABOVE: Dietrich Peltz was born on 9 June 1914 at Gera in Thüringen and qualified as an engineer before joining the Daimler-Benz aero engine company in Stuttgart in 1933. He began training with the Luftwaffe in 1935 and flying training the following year. On 20 April 1936 he was transferred to I./St.G 162, and at the beginning of the war he was a *Staffelkapitän* within I./St.G 76. He transferred to KG 77 during the Battle of Britain and commanded the II. *Gruppe* from March 1941. In August 1942 he established I./KG 60 and then in served in staff positions before being appointed *Angriffsführer* England (Attack Leader England) with the rank of Generalmajor in October 1943. On 26 January 1945 he took over IX. Fliegerkorps (J) and was largely responsible for the conversion of several bomber units to fighter duties.

BELOW:
A Ju 88 A-4 of KG 54 takes off from a Russian airfield with the aid of rocket assistance during 1942. The aircraft has the unit's 'Totenkopf' (Death's Head) badge painted below the cockpit in yellow. This insignia was retained by the unit after re-equipping with the Me 262.



The next clash between III./JG 7 and Allied aircraft came on 23 December when P-51s from the 353rd Fighter Group escorting two F-5s were bounced by Me 262s near Magdeburg. One F-5 was immediately shot down by *Ofw.* Erich Büttner. The jets and the P-51s then engaged in a mêlée down to low-level. Büttner and *Fw.* Böckel each claimed a Mustang destroyed, but neither victory can be confirmed. Tempests of 486 Squadron RAF shot down the Me 262 piloted by *Fw.* Wilhelm Wilkenloh of 1./JG 7, south of Augsburg.

Bad weather continued to hamper operations by *Luftwaffe* and Allied air forces alike, but this did not prevent the formation of a *Geschwader Stab*/JG 400 on 27 December. This was placed under the leadership of *Major* Wolfgang Späte who had the task of co-ordinating operations by the two rocket fighter groups. Command of I./JG 400 passed to *Hptm.* Wilhelm Fulda. By the end of December this *Gruppe* reported 45 serviceable Me 163s, but virtually no contact was made with the Allies during the following month.

On 29 December *Fw.* Erwin Eichhorn, a veteran jet pilot now serving with III./JG 7, was killed in a landing accident at Lechfeld. *Ofw.* Büttner from the same unit shot down a Mosquito, possibly from 544 Squadron RAF. I./KG(J) 54 was also beginning to get involved in the action, four of its Me 262s attacking a US Eighth Air Force bomber formation in the Koblenz area on the 29th and intercepting another near Kassel next day. On the last day of the year III./JG 7 moved to its operational bases, 9./JG 7 to Parchim, 10./JG 7 to Oranienburg and the *Gruppe Stab* and 11./JG 7 to Brandenburg-Briest.

The Me 262 fighter units were not involved in Operation 'Bodenplatte', the major *Luftwaffe* attack on Allied airfields on New Year's Day, but 1945 began badly for III./JG 7. *Lt.* Heinrich Lönnecker of 9./JG 7 was shot down by a P-51 and two more of the unit's Me 262s were damaged in training accidents.

About this time a special Me 262 unit was formed with the idea of dropping bombs on enemy bombers. Designated *Kommando Stamp*, it was led by *Major* Gerhard Stamp who had previously commanded I./JG 300. It had five other pilots: *Oblt.* Georg Seip, *Lt.* Herbert Schlüter, *Ofw.* Hans Gross, *Ofw.* Eberhard Gzik and *Fw.* Sturm. Schlüter explains: "Six Me 262s were assigned to the *Kommando*. Our mission was to try out a new weapons system in frontline service. An attempt was to be made with newly-developed bombs and a special sight to scatter the tight formations of US bombers by means of explosions. This, it was hoped, would then make it easier to attack them by conventional means." The unit was based at Rechlin-Lärz but no operational sorties were ever flown.

On 5 January USAAF Generals Carl Spaatz and Jimmy Doolittle warned that they would have to attack jet fighter production very soon if they were to prevent the appearance of: '...jets of such superior performance and such numbers as to challenge our aerial supremacy not only over Germany but all of Western Europe.' They estimated that 10,000 tons of bombs could set Me 262 production back by three months.

Although III./JG 7 had been formed in November 1944 it was not until early March 1945 that it was able to operate in strength. January and February were marked by trial interceptions flown in small numbers. Typical of these was the interception of 650 US Eighth Air Force bombers by a small number of Me 262s on 14 January. One of the jets was flown by *Uffz.* Helmut Detjens of 10./JG 7 who reported:

'At 12.32 hours I had taken off in 'Red 13', with a *Rotte* of Maple ² aircraft from Parchim to attack an Anglo-American fighter formation. Whilst climbing, at a height of about 6,000 metres (19,000 ft) I suddenly noticed that the temperature in my right engine had risen considerably. I then saw that my aircraft had lost a lot of fuel between the fuselage and the right engine near the landing flap. I switched off the fuel and then the right engine. After a few minutes I tried to restart it, but it produced dense smoke. I heard in my headphones that enemy aircraft were making a low-level attack on Parchim airfield. I called up the operations room of JG 7 and asked if I could land at Brandenburg-Briest. However I was ordered to land at Neuruppin. In this area I found more enemy formations; about 1,000 metres above and in front of me I saw three Mustangs on the left and four on the right coming towards me. I dived under them at an angle of 15 degrees in order to avoid their attack. Nevertheless I received hits in the left wing, engine, fuselage and cockpit, during which I was wounded by a glancing shot and a splinter. I pulled my machine over to the right and baled out. The aircraft crashed in flames near Lögow, not far from Neuruppin.'

BELOW: *Uffz.* Helmut Detjens of 11./JG 7, whose Me 262 (W.Nr. 500039) overshot the runway at Jüterbog during a training mission on 1 January 1945. Two weeks later he was forced to bale out after an Me 262 (W.Nr. 130180), 'Red 13', which he was flying was shot down by P-51s near Lögow.



(2) 'Maple' and 'Silber' were code names for the Me 262.

Just afterwards, a second Me 262, piloted by Fw. Heinz Wurm of 9./JG 7, was chased down to ground level and also shot down. Next day, I./JG 7 suffered its first loss of the year when an Me 262 piloted by Uffz. Hans Werner suffered an engine fire near Kaltenkirchen. He died in the crash. On 17 January Hptm. Eder claimed a B-17 shot down near Paderborn.

On 19 January, Göring called a meeting of all fighter *Kommodoren* in Berlin, entreating them to speak freely about certain grievances they held. Their spokesman was the respected fighter ace, *Obstlt.* Günther Lützow. He complained of the influence former bomber commanders such as Peltz and Herrmann seemed to have, the misuse of the Me 262, Göring's own slurs on the fighter pilots and the increasing humiliation and marginalisation of Galland. Göring listened with increasing fury, believing that Galland had instigated this so-called 'mutiny'. Finally he shouted that this was a "mutiny without parallel in history" and threatened to have them all court martialled. Two days later he announced that Galland would be placed under house arrest and Lützow banished to Italy where he would take up the relatively insignificant post of *Jafü Oberitalien*. Another of the 'mutineers', *Oberst* Steinhoff, was also dismissed as *Kommodore* of JG 7 and replaced by Hptm. Theodore Weissenberger. Command of I./JG 7 then passed to Major Erich Rudorffer, an experienced ace with 212 kills to his credit, while Major Rudi Sinner took over the III. Gruppe from Hohagen.

Lt. Richard Frodl, who was appointed Technical Officer of I./JG 7 on 3 January, remembered: "*I reported to Steinhoff, but shortly afterwards his place was taken by Hptm. Weissenberger, Rudorffer being my direct superior. At this time we were based at Brandenburg-Briest, but we soon moved to Kaltenkirchen in Schleswig-Holstein where I took over as Geschwader TO. The Staffelfkapitän at this time were Oblt. Hans Grünberg, (1./JG 7) Oblt. Fritz Stehle (2./JG 7) and Oblt. Hans-Peter Waldmann (3./JG 7)*".

If Fritz Wendel of Messerschmitt's *Technische Aussendienst* had been critical of Nowotny's handling of jet fighter operations, he had the opposite opinion of the new leaders of JG 7: "*Hptm. Weissenberger³, in collaboration with the Kommandeur of the III. Gruppe, Major Sinner, made excellent preparations for operational deployment. Ground control was perfected. "Safe flying" training was initiated: i.e. the pilots were trained in the use of radio aids for navigational purposes using the aircraft's radio equipment. Finally, formation flying in Gruppe strength was practised.*"

For his part, Rudi Sinner held a high opinion of the Me 262. "*I was pleased and proud to be responsible for the testing and operational combat of a new, greatly promising and interesting weapon. With the advantages of increased speed and firepower it was now possible to catch aerial targets – especially photo-reconnaissance aircraft – which, due to their superior performance compared to our piston-engined fighters, could previously not have been taken on.*"

Wendel was not so complimentary about the training of I./KG(J) 54, however, reporting on an attempted formation take-off on 23 January:

'Sixteen aircraft were scheduled to take off at 10.00 hours but four could not taxi as the Riedel starter failed on the first, the tailplane trim could not be adjusted on the second, tailplane adjustment was not functional on the third, having worked loose due to engine vibration, and a leak was discovered in a compressed air line in the fourth. As the remaining twelve fighters began their taxiing run two more aircraft had to abort. The first aircraft had been loaded with full fuel tanks but no ammunition and the second had a pressure gauge which was not reading correctly. Of the ten aircraft that actually took off, six suffered some kind of problem so that only four returned in a combat ready condition.'

Despite these problems, plans were being made for the future of the Me 262, but even these fell victim to the dispute between the bomber and fighter factions within the *Luftwaffe*. The former demanded the conversion of most of IX. *Fliegerkorps*' bomber units, KG(J) 6, KG(J) 54 and KG(J) 55, to the Me 262. JG 400 would remain and eventually be re-equipped with the Me 263 (or Ju 248 as it was known after the design was handed over to Junkers), while new units would be created to operate the He 162 and Ta 152. The fighter faction, on the other hand, asked for the immediate conversion of JG 300 and JG 301 to the Me 262. It was agreed that by June 1945, ten Me 262 fighter *Gruppen* would be operational: I., II. and III./JG 7, III./KG(J) 6, I., II. and III./KG(J) 54 and either I., II. and III./KG(J) 55 or I., II. and III./JG 300.



ABOVE: Oblt. Hans-Peter 'Dackel' Waldmann was born on 24 September 1922 in Braunschweig. He flew his first mission on 31 August 1942 over Russia with 6./JG 52 and after serving with a fighter training school, transferred to 8./JG 3 in May 1944. He became Kapitän of 3./JG 7 on 21 November 1944, but was killed on 18 March 1945 when his aircraft collided with that of his wingman. He had flown a total of 527 missions, claimed 134 victories (two with the Me 262) and had been awarded the Ritterkreuz with Oak Leaves, the latter while serving with JG 7.

(3) Weissenberger was promoted to Major on 10 February 1945.

III./KG(J) 6 under *Hptm.* Hans Baasner had received its first two Me 262s in January 1945, with a further six arriving towards the end of February. Priority was given to re-equipping the 7. *Staffel* under *Oblt.* Henning Gulde based at Prag-Rusin, but it was not until the beginning of March that the first operational sorties were flown.

By now, production of the He 162 was well under way. Initially it was proposed, on 9 January, to establish *Erprobungskommando 162* to introduce the aircraft to operational service. The plan for the establishment of this unit was discarded on 21 January and replaced by a scheme to form a complete new *Jagdgeschwader* to be known as JG 200, but this designation was almost immediately changed to JG 80. Part of this unit, the *Stabsstaffel*, was actually formed at Goslar, but shortly afterwards it was decided that the first He 162s would instead be delivered to JG 1! In anticipation of this, on 8 February, I./JG 1 handed over its Fw 190s to the II. *Gruppe*, and transferred to Parchim.

Meanwhile, while *Luftwaffe* leaders continued to argue, even III./JG 7 was still not fully operational. It nevertheless managed to lose five pilots and had 13 aircraft written off plus a further ten damaged by the end of January. On 2 February, the Chief of Operations Staff (*Chef Führungsstab*) finally gave official permission for it to operate unhindered against enemy reconnaissance aircraft and fighters. The *Führungsstab* also reported that the *Gruppe* had 17 serviceable Me 262s with a further ten on their way.

Next day the US Eighth Air Force attacked a synthetic oil plant and transportation targets at Magdeburg. III./JG 7 took off to intercept, *Lt.* Rudolf Rademacher claiming two B-17s while *Oblt.* Wegmann and *Lt.* Weber and *Lt.* Karl Schnörrer claimed one each. *Hptm.* Eder of 9./JG 7 may have shot down two P-47s and *Uffz.* Schöppler claimed a P-51. The Americans lost a total of 23 B-17s and seven P-51s, the only claim against a jet being made by a Mustang of the 364th Fighter Group which damaged an Me 262 south of Gardelegen.

On 9 February KG(J) 54 flew its first major operation when 18 Me 262s led by the *Kommodore* took off from Giebelstadt at 11.30 hours to intercept a group of US bombers near Fulda. The American crews reported that the inexperienced jet pilots seemed reluctant to attack, but eventually the flight leader engaged and shot down a B-17 in flames. At that moment three P-51 Fighter Groups waded in to attack, claiming six Me 262s destroyed. These included those flown by the *Kommodore*, *Obstlt.* Riedesel zu Eisenbach, the *Gruppe Adjutant*, *Oblt.* Walter Draht, the *Gruppe TO*, *Oblt.* Günther Kahler, the *Kommandeur* of I./KG(J) 54 and *Major* Ottfried Sehrt. The first three pilots were killed, but Sehrt received a bullet through his shin, bled out and returned to the unit a week later.

Near Berlin, Me 262s from III./JG 7 attacked a formation of B-17s, *Lt.* Rademacher claiming two and *Hptm.* Eder and *Oblt.* Wegmann one each. *Lt.* Schnörrer claimed a P-51.

Next day the *Luftwaffe* High Command ordered the new *General der Jagdflieger*, *Oberst* Gordon Gollob to form II./JG 7 from IV./JG 54 and equip it with the Me 262. While 13., 14. and 15./JG 54 were to become 5., 6. and 7./JG 7, 16./JG 54 was to be placed at the disposal of Galland (who had been released from house arrest) for the establishment of his own Me 262 fighter *Staffel* to be known as JV 44. Also on the 10th, 1./JG 400 lost its first pilot for some weeks when *Fw.* Gerhard Mohr was killed.

On 12 February III./JG 7 finally became fully operational with 50 aircraft. Two days later six Me 262s from 11./JG 7 and two from I./JG 7 intercepted a formation of B-17s between Lübeck and Neumünster. *Lt.* Rademacher, *Uffz.* Schöppler and *Uffz.* Günther Engler each claimed one destroyed, but an Me 262 was reported shot down. Three Me 262s from I./KG(J) 54 attacked a US bomber escort at 15.15 hours east of Stassburg, claiming one P-51 badly damaged. Also on this day, *Obstlt.* Heinz Bär took over command of the Me 262 fighter training unit III./EJG 2 from *Hptm.* Horst Geyer, and the original Me 163 unit, *Erprobungskommando 16*, was disbanded.

KG(J) 54 attempted to intercept US bombers attacking oil targets on 15 February. Two Me 262s, piloted by *Uffz.* Hermann Litzinger and *Uffz.* Kurt Lange were destroyed and another damaged in an emergency landing. I./JG 7 also lost a pilot killed when *Uffz.* Hans Werner's aircraft caught fire south of Kaltenkirchen shortly after take-off. I./KG(J) 54 were again active on 17 February, one Me 262 piloted by *Oblt.* Fritz Theeg



ABOVE: Four members of III./JG 7 photographed during a pause in operations. From left to right are: *Oblt.* Fred Leitner, a fighter controller; *Oblt.* Günther Wegmann, *Kapitän* of 11./JG 7; *Lt.* Joachim Weber, pilot; and *Fw.* Hans Zeller, another fighter controller.

BELOW: *Obstlt.* Volprecht Riedesel Freiherr zu Eisenbach (left), *Kommodore* of KG(J) 54 and *Major* Ottfried Sehrt (right), *Kommandeur* of I./KG(J) 54, discuss a forthcoming mission at Giebelstadt in December 1944. Riedesel was killed on 9 February 1945 when his Me 262, B3+AA (W.Nr. 500042), was shot down by American fighters. Sehrt was injured in the leg 16 days later in combat with B-17s while flying B3+AB (W.Nr. 110799).



of the 1. *Staffel* being destroyed and another damaged. Three Me 262s from 11./JG 7, led by the *Staffelkapitän*, *Hptm.* Eder with *Ofw.* Helmut Zander and *Ofw.* Hermann Buchner, took off from Parchim to intercept an American formation over northern Germany. As they closed, Eder's Me 262 was shot up by gunfire from the bombers and he was badly injured. Next day the port engine of *Major* Weissenberger's Me 262 caught fire and, although he baled out, he too was hurt.

On 21 February 1945 US Eighth Air Force P-47s strafed Giebelstadt airfield, killing the *Staffelkapitän* of 3./KG(J) 54, *Oblt.* Christian Wunder. Next day 34 Me 262s from III./JG 7 clashed with Allied aircraft which had launched Operation 'Clarion', an all-out attack against German rail and communication targets. Thirty-four Me 262s from III./JG 7 took off to engage the bombers but were not able to intercept as they were immediately involved in intensive actions with enemy fighters. I./JG 7 then took off from Kaltenkirchen led by the *Kapitän* of 3./JG 7, *Oblt.* Waldmann, who claimed two P-51s around midday near Oschersleben. The only other successes were claimed by *Gef.* Hermann Notter (two B-17s) and *Ofw.* Buchner (a P-51). JG 7's losses were three Me 262s destroyed and two others badly damaged in combat. Perhaps the most notable of these was that flown by the veteran jet pilot *Ofw.* Baudach, who died after baling out near Schönewald.

The *Luftwaffe* Chief of Staff, *General* Karl Koller, finally gave permission for the formation of Galland's jet fighter *Staffel* on 24 February. The unique designation *Jagdverband* (JV) 44 was allocated. The *Gruppenstab* was to have an establishment of five officers, seven pilots and seven aircraft and the *Fliegerstaffel* an establishment of 15 pilots and 16 aircraft. Transferring to Brandenburg-Briest, which was already in use by parts of III./JG 7, Galland now began his search for pilots. Those recruited at this time included Steinhoff (whom he appointed head of training), *Oberst* Lützow (from Italy), *Major* Hohagen and *Major* Karl-Heinz 'Bubi' Schnell (both from hospital) and Steinhoff's old wingman, *Lt.* Gottfried Fährmann.

In an attempt to intercept a major American raid on 25 February, 16 Me 262s from I./KG(J) 54 took off from Giebelstadt. As they climbed through low cloud they were bounced by P-51s of the US 55th Fighter Group. With height advantage, the Americans were able to wreak havoc amongst the inexperienced jet pilots. In a series of furious actions, the Americans claimed no fewer than seven Me 262s.

The two disastrous operations flown by I./KG(J) 54 on 9 and 25 February led Peltz to suggest that KG(J) 6 and KG(J) 27, which were then undergoing retraining, be temporarily employed in the East. Koller agreed to this in principle, but believed that the units should be assigned to *Luftflotte* 4 instead of *Luftflotte* 6 as the fuel situation of the former was more favourable. As soon as the standard of training permitted, operations would be flown against heavy bomber incursions from Italy. Koller believed that success would be achieved through surprise as the Americans had not encountered fighter opposition in this area for over a year.

On the last day of February, 22 Me 262s from III./JG 7 and nine from I./KG(J) 54 engaged four-engined bombers in the area between Braunschweig and Brandenburg. The former unit reported no successes or losses, but the latter had two aircraft damaged. In addition III./JG 7 had three aircraft destroyed and I./KG(J) 54 another, all in accidents.

BELOW:

Ofw Helmut Baudach was a veteran jet fighter pilot, having served successively with *Erprobungs-kommando* 262, *Kommando* Nowotny and III./JG 7. During combat with Mustangs near Schönewald on 22 February 1945, Baudach was injured and, as he attempted to bale out from his stricken Me 262, his head hit the tail fin which resulted in his death a few days later.



RIGHT: *Major* Erich Hohagen, wearing a skullcap to cover the head injury he received as *Kommandeur* of I./JG 2 when his Fw 190 crashed, is shown here with another pilot after a training flight in an Me 262 of III./EJG 2. The aircraft to the left is 'White 7' while, to the right, can be seen one of the few Me 262 B-1a two-seat trainers delivered to the unit.



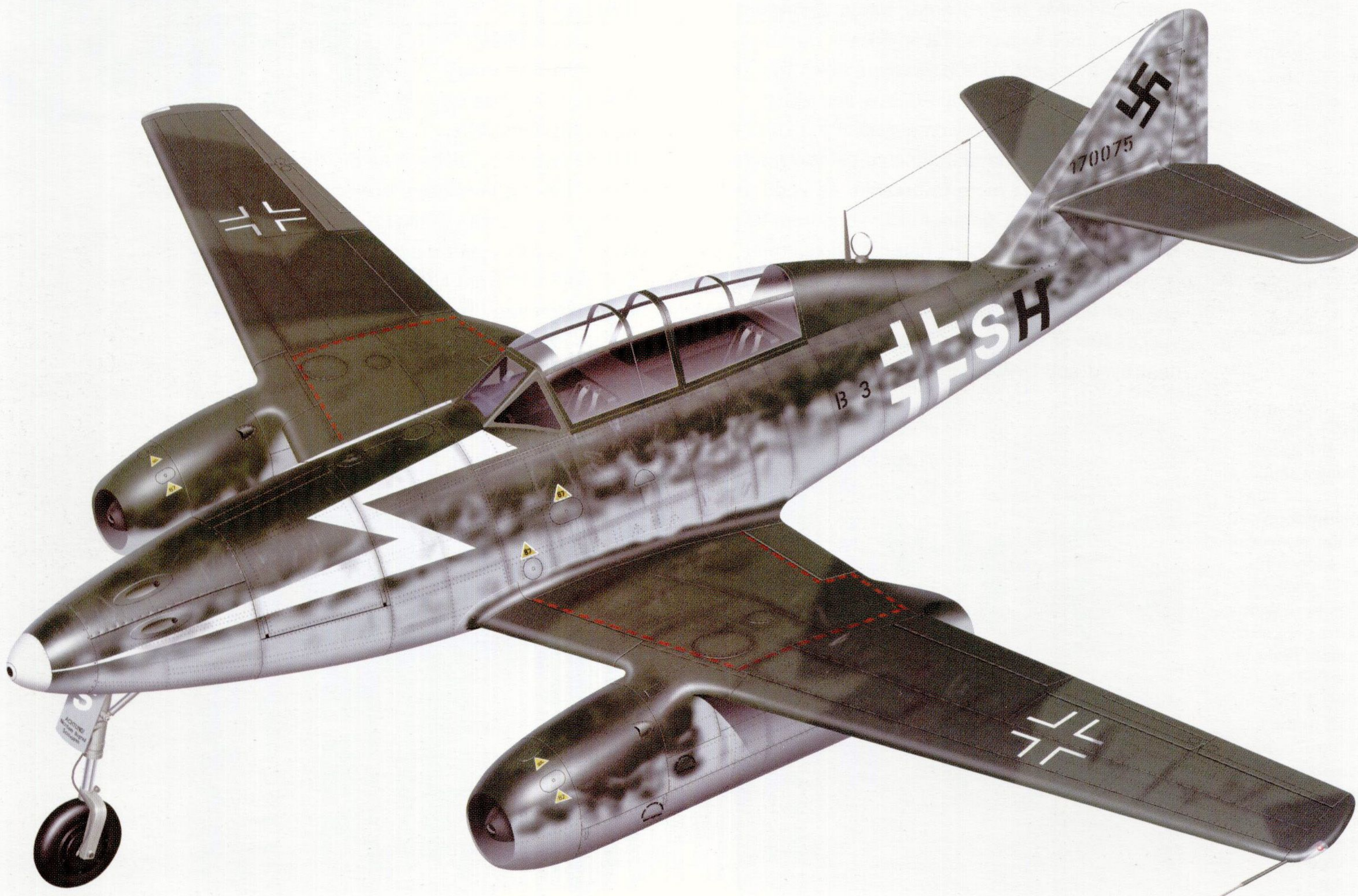
1944-1945

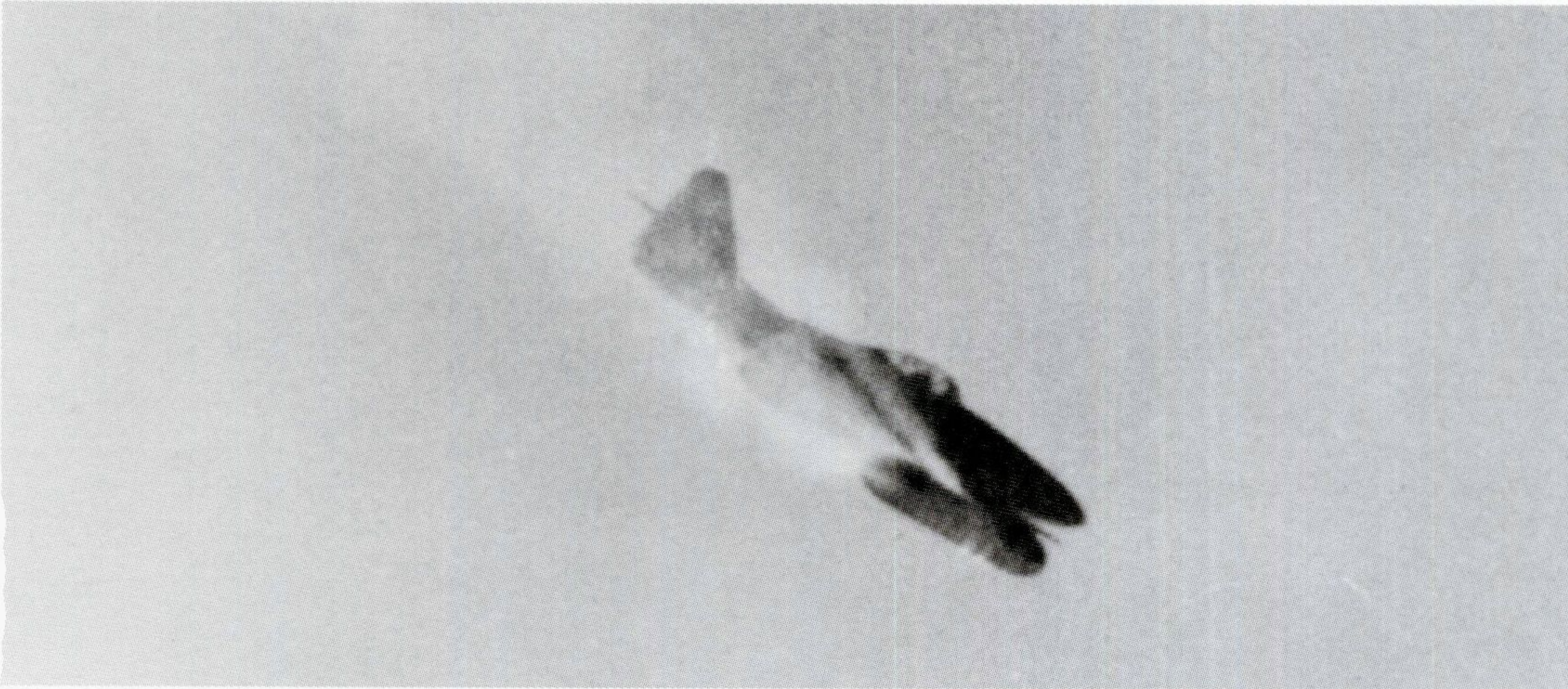


The first Me 262 B-1a (W.Nr. 170075) two-seat trainer was delivered to 1./KG(J) 54 at Giebelstadt on 4 November 1944. Many of these aircraft were converted from single-seaters by Blohm and Voss workshops in Hamburg.

Messerschmitt Me 262 B-1a (W.Nr. 170075) of 1./KG(J) 54 at Giebelstadt, November 1944

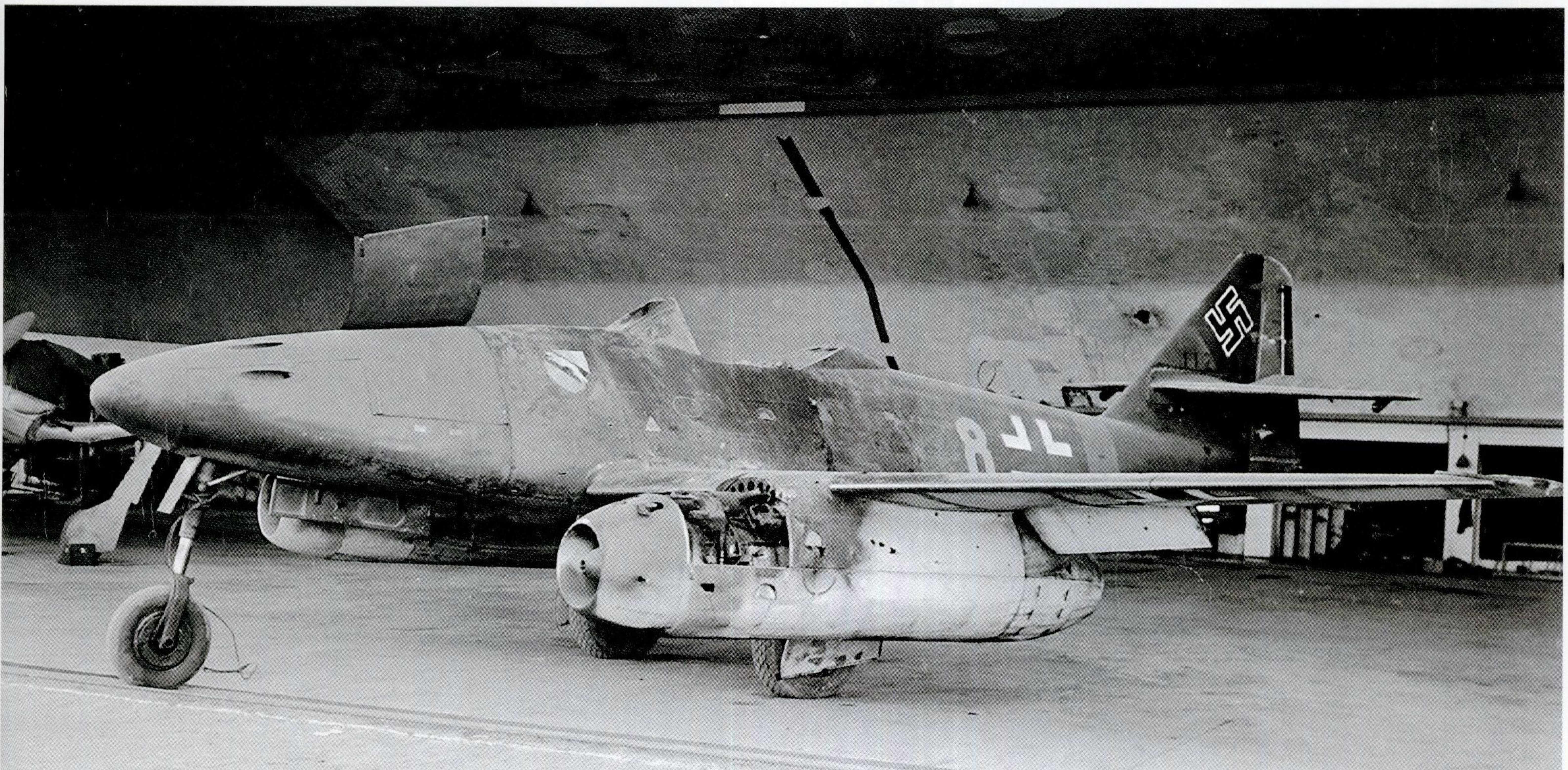
Sadly for the many Luftwaffe pilots converting to jet aircraft, relatively few two-seat Me 262 B-1as were available for training. The first two characters of the code 'B3' on this machine were about one fifth the size of the remaining letters 'SH'. The aircraft was also unusual in having a white lightning streak painted on the forward part of the fuselage.

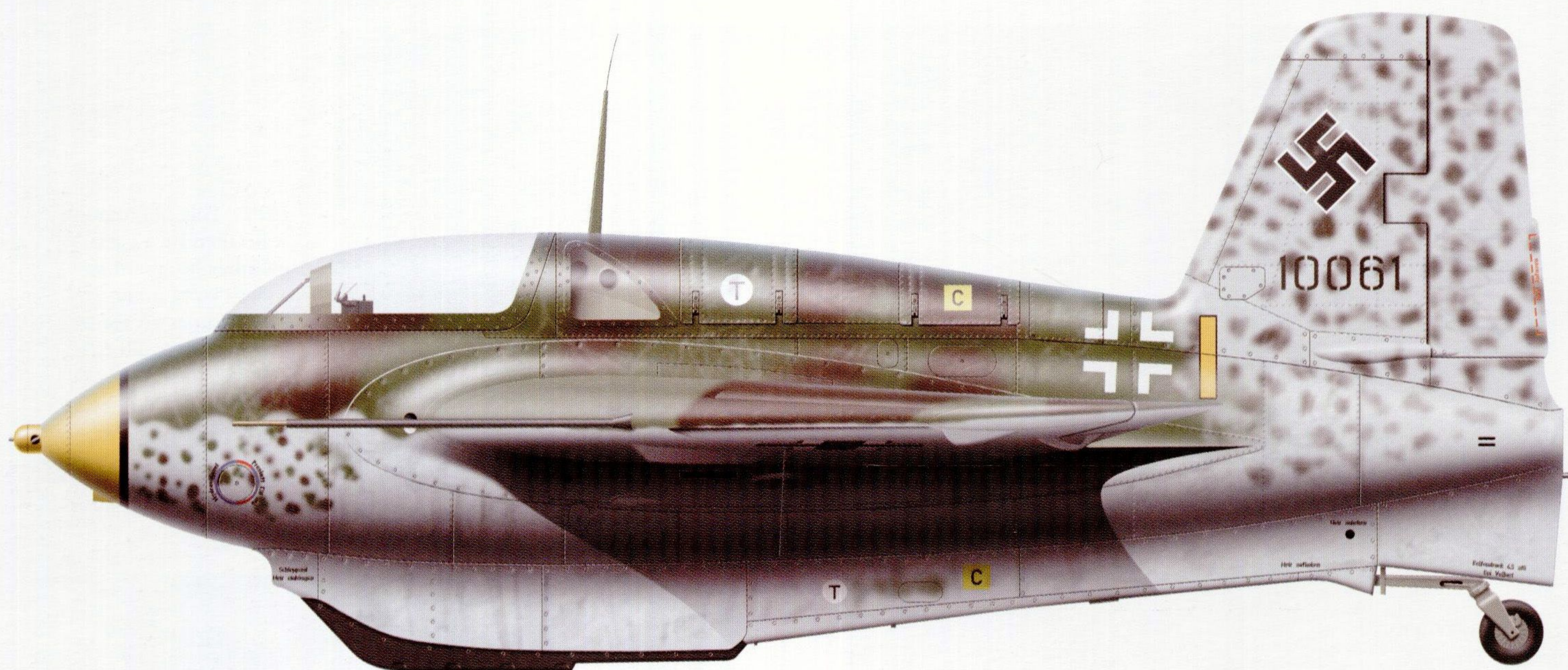




LEFT: This photograph was taken by a crew member on board an American bomber formation as an Me 262 dived past his aircraft.

RIGHT AND BELOW: Captured by forces from the US 5th Armored Division at an airfield between Stendal and Borstel on 15 April, this Me 262 A-1a 'Yellow 8', W.Nr. 112385 had accidentally been fired upon by German flak which damaged the port engine. The aircraft, 'Yellow 8' (W.Nr. 112385) was scrapped after the war at Kassel/Rothweston. It was finished in brownish green (RLM 81) and medium green (82) upper surfaces with pale blue (RLM 76) beneath.

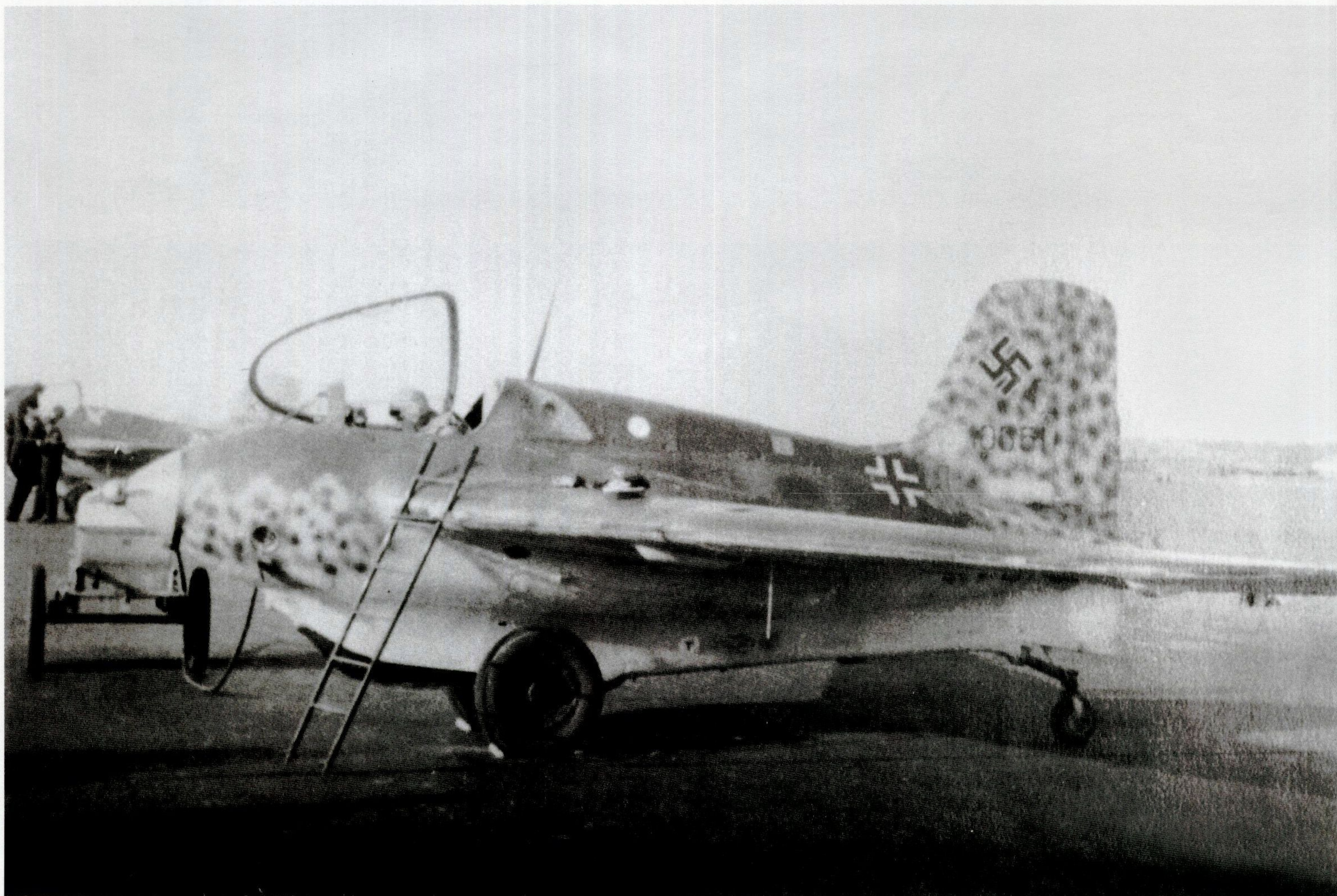




Messerschmitt Me 163 B V52 (W.Nr. 163 100 61) of 7./JG 400 at Nordholz, April 1945

This aircraft has brownish green and medium green (RLM 81 and 82) camouflage with small mottles on the nose, rear fuselage and vertical tail surfaces. The yellow number '1' indicated an aircraft of 7./JG 400.

BELOW: This Me 163 B V52 (W.Nr. 163 10061) which was flown by Lt. Reinhard Opitz, commander of 7./JG 400, was photographed at Nordholz on 10 April 1945. Two days later it was flown to Husum where it was later captured by British troops and brought to the UK before being handed over to the French Air Force.



RIGHT: An Me 262 A-1a of the Stabsstaffel of JG 7 with dark green uppersurfaces and pale blue beneath. The aircraft carried a small green number '3' below the Geschwader emblem.



BELOW: A small number of Me 262s were fitted with two 21 cm WGr 21 rocket mortars beneath the forward fuselage. These aircraft were delivered to the Stabsstaffel of JG 7, but the weapon proved ineffective and was soon replaced by the 55 mm R4M rocket. This aircraft, 'Green 3' carries a single chevron in black on the rear fuselage and a very unusual camouflage pattern.

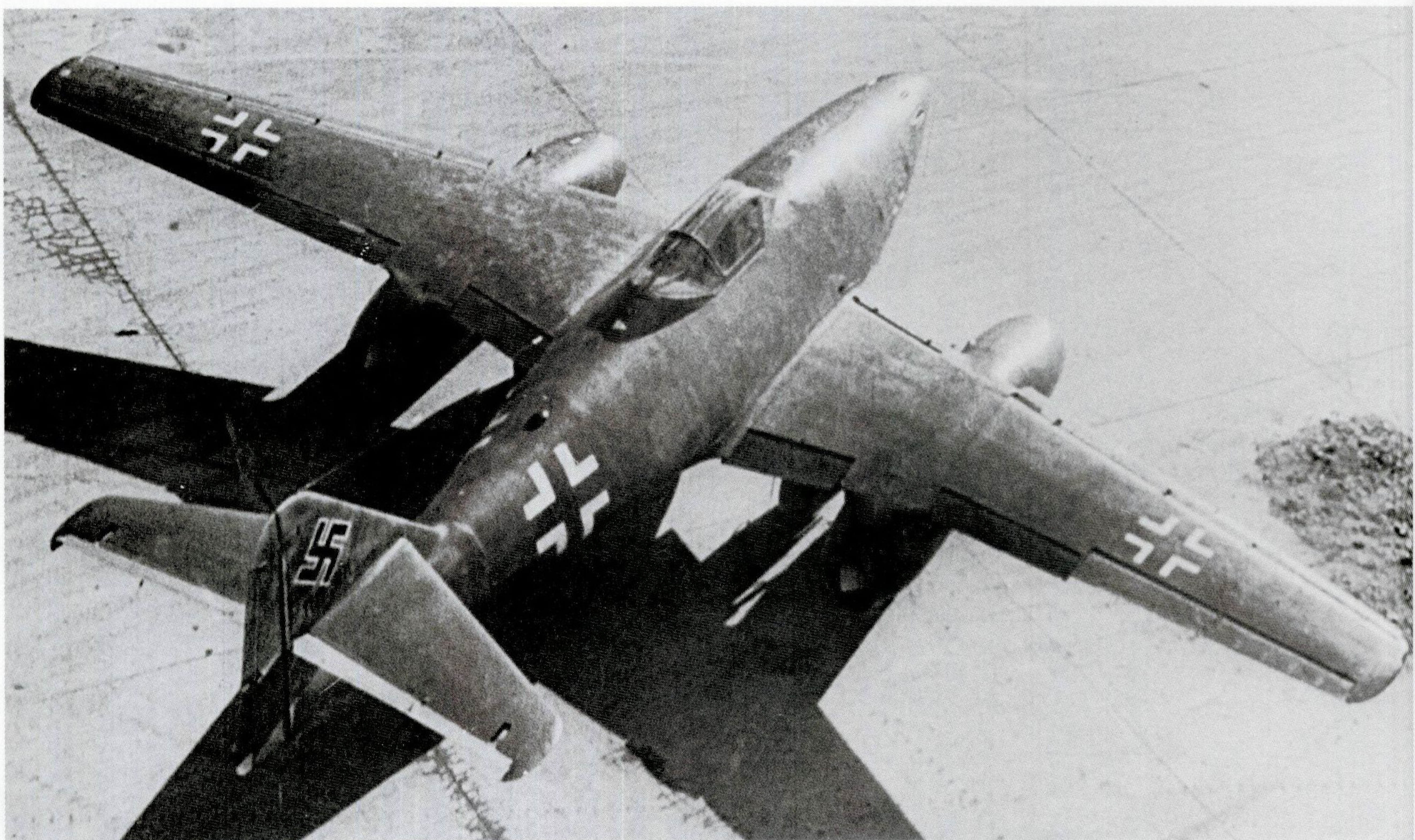


Messerschmitt Me 262 A-1a (W.Nr. unknown) of Stabsstaffel/JG 7 at Rechlin, February 1945

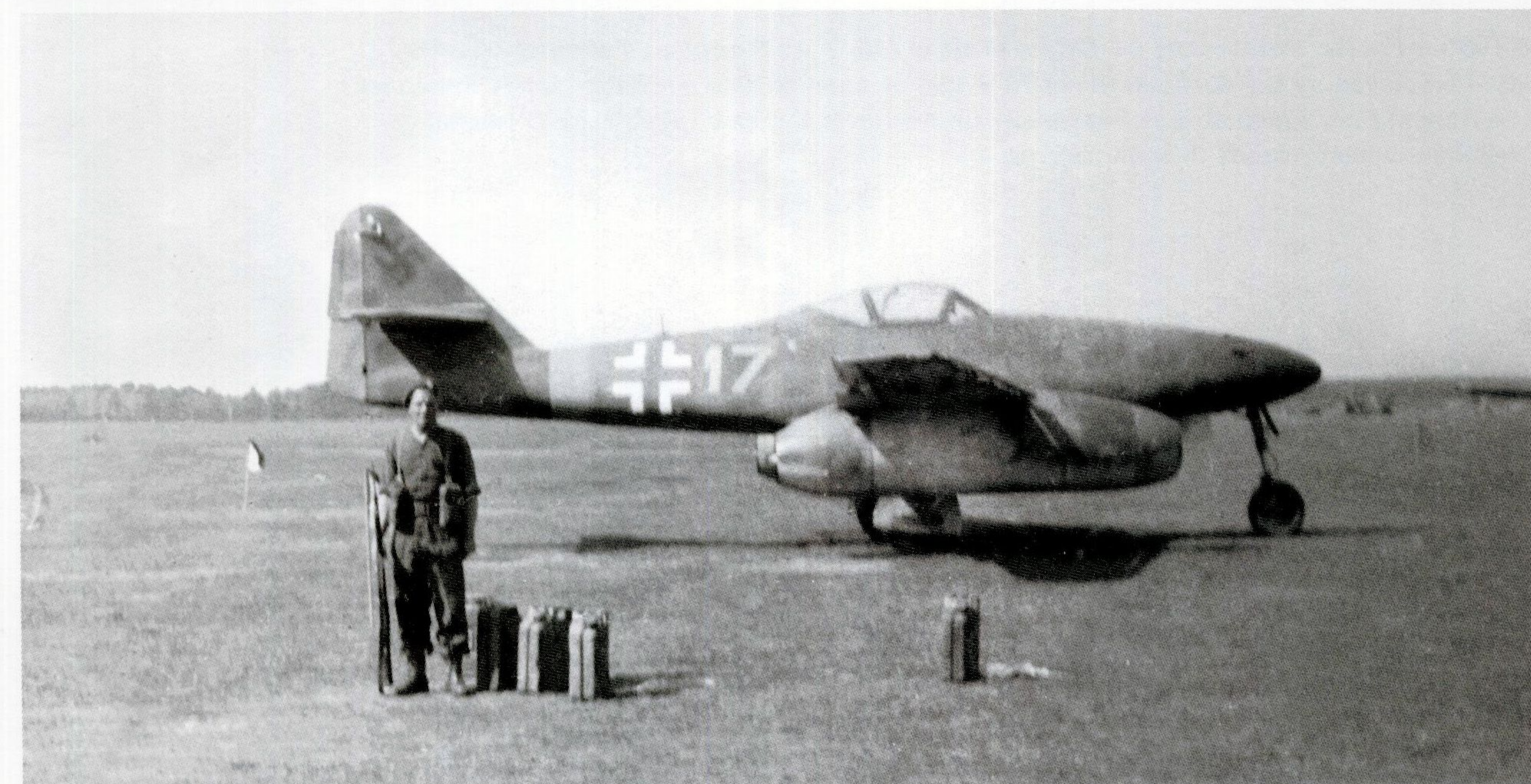
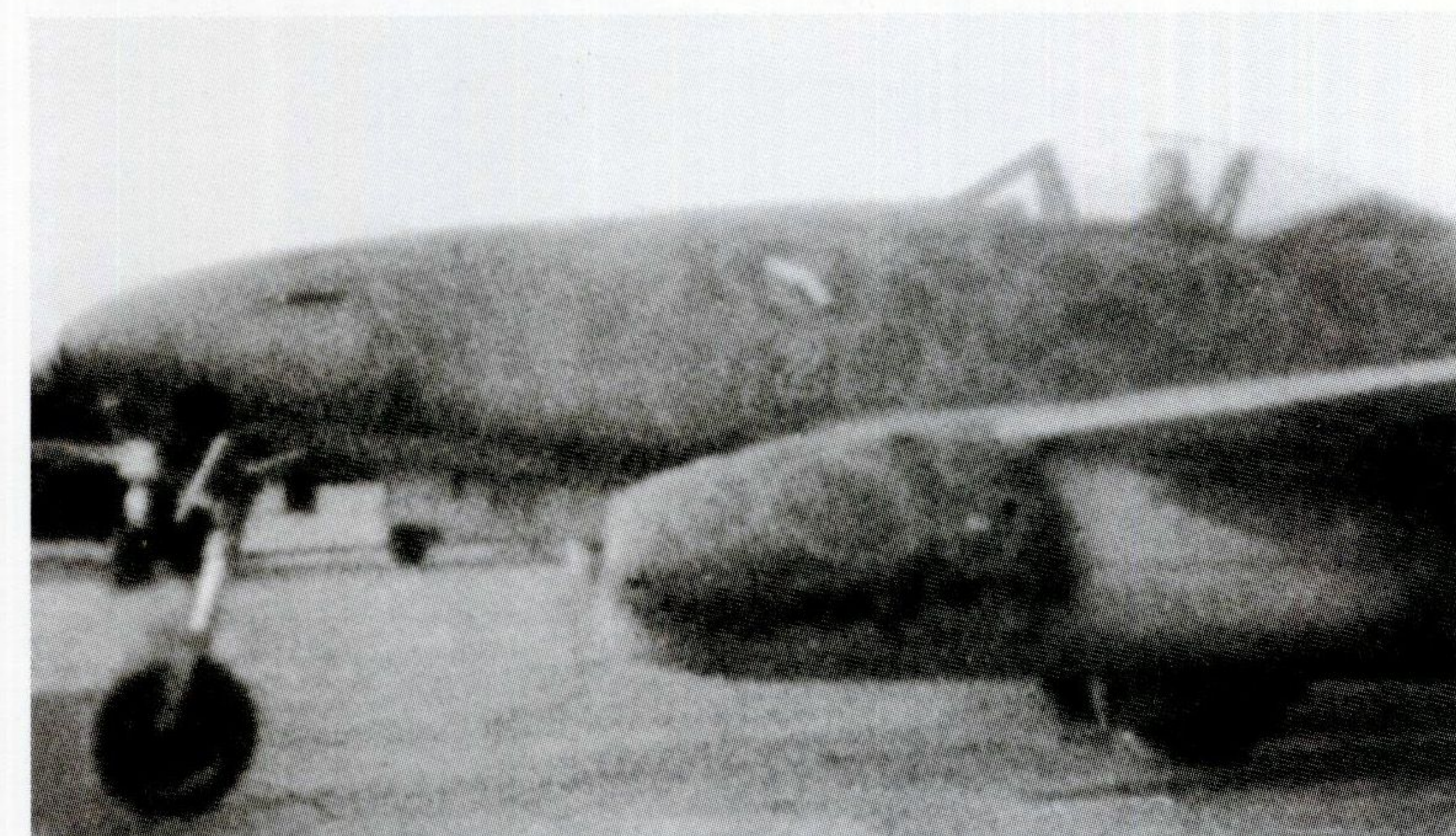
Another camouflage variation employed by the Stabsstaffel of JG 7 can be seen on this aircraft which is armed with two WGr 21 air-to-air mortar tubes. Dark green stripes have been sprayed over the pale blue (RLM 76) fuselage sides, with the wing and tailplane uppersurfaces in solid dark green.



RIGHT: A relatively rare view of an Me 262 showing the partly swept back wings which were such a feature of the aircraft.



BELOW AND BELOW RIGHT: Extracted from a cine film taken on 7 April 1945, these rather blurred photographs show two Me 262s of 11./JG 7 preparing for operations. The aircraft in the foreground has the red number '2' painted below the unit badge and a rather unusual mottled camouflage pattern is notable.



LEFT: An Me 262 'Yellow 17' of 3./JG 7 captured after the war. This aircraft, piloted by Lt. Hans Dorn, also carries blue and red unit identification rear fuselage bands, but is unusual in having a solid black Hakenkreuz (swastika) painted on the fin.



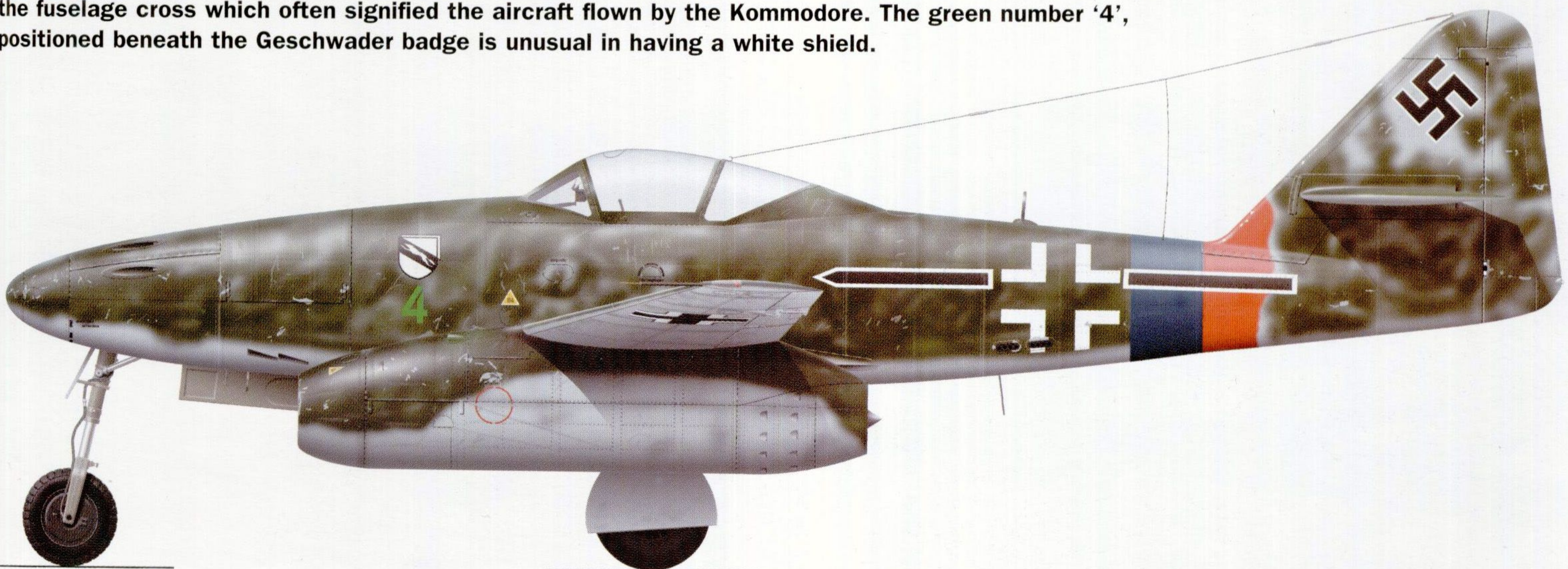
LEFT: Major Theodor Weissenberger was born on 21 December 1914 at Mühlheim/Main. He joined the Zerstörerstaffel of JG 77 in September 1941, claiming his first aerial victory on 23 October. He transferred to II./JG 5 in September 1942, becoming Kapitän of the 7. Staffel in June 1943. He took over 6./JG 5 in September and was appointed Kommandeur of II./JG 5 on 26 March 1944. On 4 June he took over I./JG 5 based in France, this unit being renamed III./JG 6 on 14 October 1944. By this time Weissenberger had 200 victories and the Ritterkreuz with Oak Leaves. On 21 November he was appointed Kommandeur of I./JG 7, becoming Kommodore of the Geschwader on 15 January 1945. Unlike Walter Nowotny, his leadership and technical expertise was greatly praised by Messerschmitt's trouble-shooter, Fritz Wendel. Weissenberger was killed in a motor race at the Nürburgring on 10 June 1950.



RIGHT: Major Theodor Weissenberger took over command of JG 7 from Oberst Johannes Steinhoff on 15 January 1945. This excellent leader - whose aircraft is believed to be that shown here - did much to successfully introduce the jet fighter to operational service until injured on 18 February when an engine of his aircraft exploded in flight.

Messerschmitt Me 262 A-1a (W.Nr. unknown) of Geschwader Stab/JG 7 at Brandenburg-Briest, January 1945

Probably flown by the Kommodore of JG 7, Major Theodor Weissenberger, this Me 262 had more or less standard camouflage for the period. It had two black horizontal bars outlined in white on either side of the fuselage cross which often signified the aircraft flown by the Kommodore. The green number '4', positioned beneath the Geschwader badge is unusual in having a white shield.



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ABOVE: This Me 262 A-1a, 'Yellow 3' (W.Nr. 501221) was shot down at Klötze (Gardelegen/Stendal) in Germany. It fell to the MG 51 machine-gun fired by Pfc. Ralph V. Caputo of 'C' Battery of the US 559th Anti-Aircraft Artillery Group on 21 April 1945. Its pilot, from 11./JG 7, was taken prisoner. The aircraft may have been flown at one time by Lt. Fritz R.G. Müller of 11./JG 7.

RIGHT: An Me 262 A-1a of 10./EJG 2 is prepared for a training mission. The white number '6' is thinly outlined in black.



BELOW: This Me 262 A 'White 17' (W.Nr. 110956) was delivered to III./EJG 2 at Lechfeld and was flown by Fw. Franz Holzinger on 16 March 1945. It was captured at Lechfeld on 29 April 1945. The white letter 'S' indicates that the aircraft was a Schulemaschine, only to be used for training.

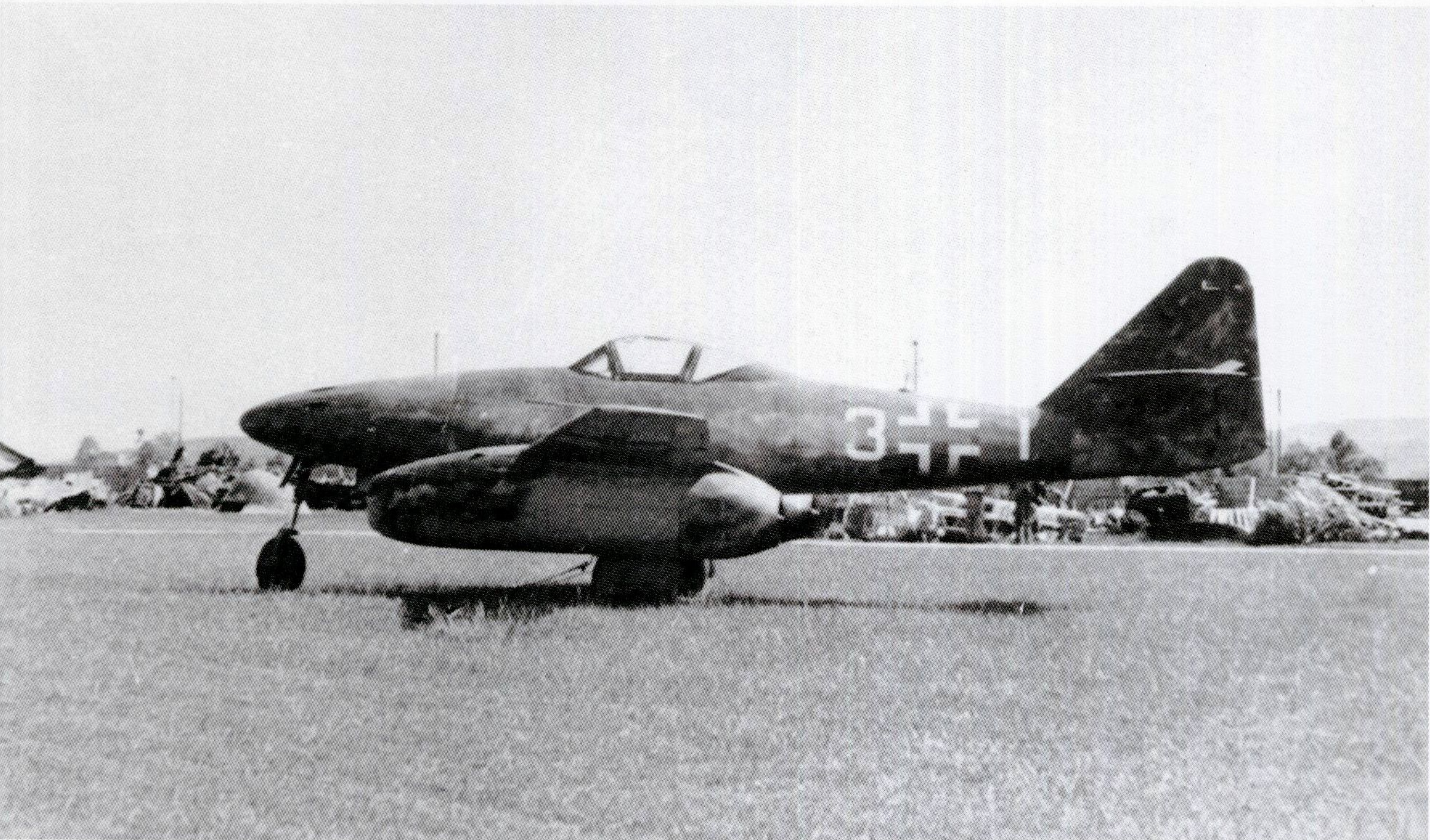




ABOVE: Ground personnel from of III./EJG 2 refuel an Me 262 B-1a two seat trainer, 'White 17', while a pilot checks the controls. Relatively few Me 262 trainers were completed, but their introduction greatly improved pilot training.



ABOVE: After retraining on the Me 262, a group of pilots from 2./KG(J) 54 pose with one of their aircraft. The 'Death's Head' badge of the Geschwader, seen on the nose of the aircraft, had been carried by KG 54 since its formation in May 1939.



LEFT:
This Me 262 A-1a made a forced landing in Switzerland on 25 April 1945 due to lack of fuel. Its markings can be considered typical of those carried by 9./JG 7, with a white number forward of the fuselage Balkenkreuz and a white vertical bar aft. The latter was superimposed on the blue and red bands, each of 450 mm width, adopted by JG 7.

1944-1945



LEFT: The fuselage of Me 262 'B3+EK' of 2./KG(J) 54 at Giebelstadt, May 1945. Note the 'Deaths Head' emblem of KG 54 which was retained even after the unit had converted to fighter operations.

Messerschmitt Me 262 A-1a (W.Nr. unknown) of 2./KG(J) 54 at Giebelstadt, April-May 1945

In another variation of the camouflage schemes carried by aircraft of KG(J) 54, this Me 262 has a more conventional finish. The individual letter of the aircraft code 'E' is painted bright red, the colour indicating the second Staffel of a Gruppe.



RIGHT: Two Me 262 A-1as of 7./KG(J) 54 photographed at Neuburg-am-Donau airfield in March 1945. The aircraft to the left has an unusual 'Wellenmuster' or wave type camouflage sprayed over its normal dark green uppersurfaces. Note that the white of the Balkenkreuz on the wing and fuselage of the other machine have been covered with fabric to make the aircraft less visible from the air.





LEFT: The markings of Erprobungskommando 262 were retained by III./EJG 2 after its formation on 7 November 1944. This aircraft, 'Yellow 7' (W.Nr. 110376), is being examined by American troops at Neubiberg after the end of the war.

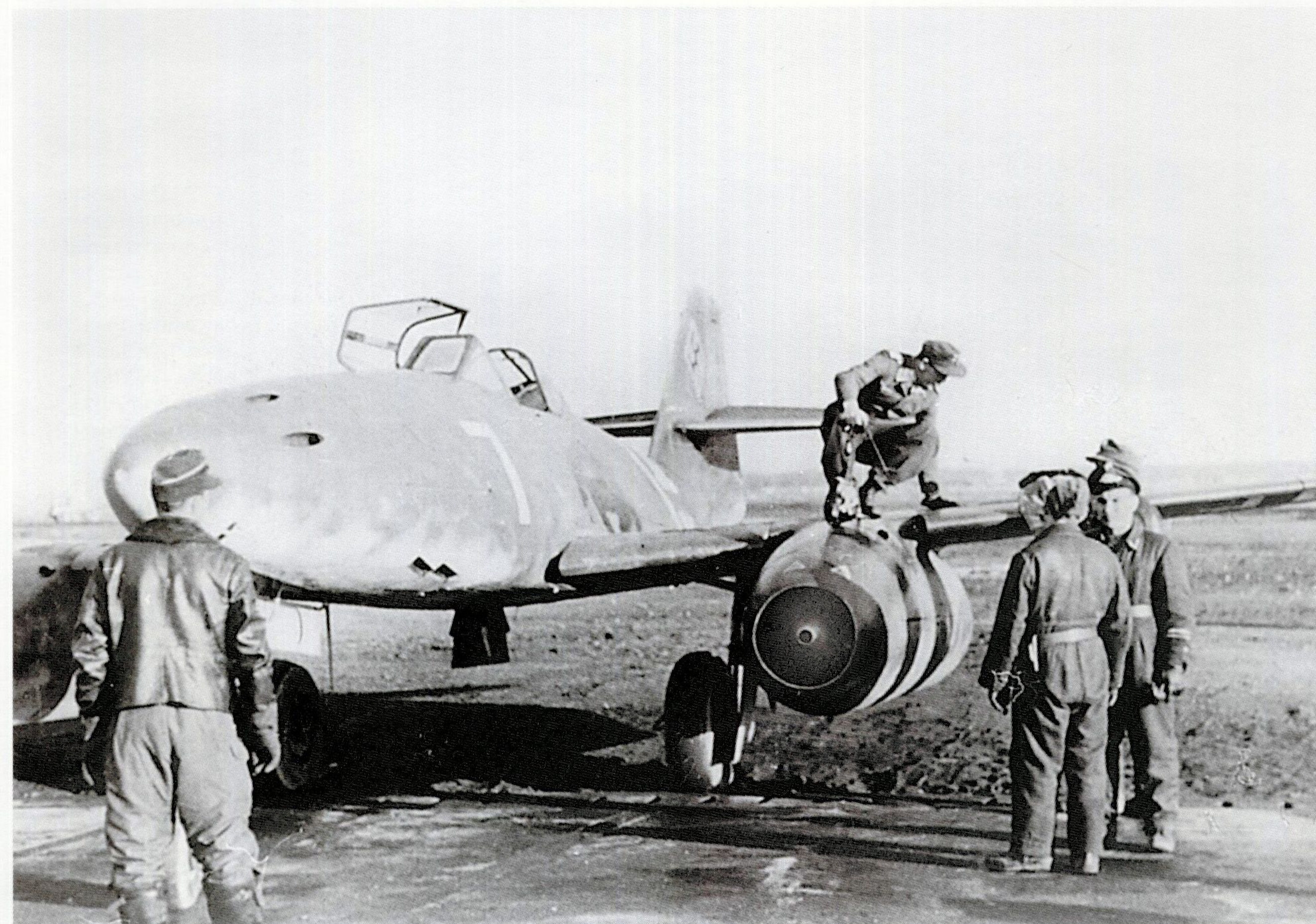
RIGHT: This rare photograph shows Germany's two fastest fighters together on an operational airfield, possibly Brandis near Leipzig. To the left is the Me 163 B 'White 2' (W.Nr. 440184) of I./JG 400. This aircraft was lost on 10 February 1945, its pilot, Fw. Gerhard Mohr, being killed. The Me 262 on the right (with its individual letter 'C' painted in yellow on the rear fuselage) probably belonged to 3./KG(J) 54 which used the airfield for a brief time during its transfer south.



LEFT: Oberstleutnant Heinz Bär was born on 25 March 1913 at Sommerfeld near Leipzig. His first victory was claimed on 25 September 1939 while serving as an Unteroffizier with I./JG 51 in the West. On 11 May 1942 he became Kommandeur of I./JG 77, subsequently commanding 11./JG 1 (between December 1943 and May 1944), II./JG 1 (until May 1944) and then becoming Kommodore of JG 3 until February 1945. Finally he took over the jet fighter training Gruppe III./EJG 2 before replacing Galland as leader of JV 44 after the latter's injury. He claimed his 100th victory on 19 May 1942, and his 200th on 22 April 1944 and was awarded the Ritterkreuz with Oak Leaves and Swords. Of his total of 220 victories, 16 are apparently achieved while flying the Me 262. He was killed at Braunschweig on 28 April 1957 when the light aircraft he was flying spun into the ground from a low altitude.

RIGHT: Seen while a Major, Heinz Bär of III./EJG 2 sits on the port wing of his Me 262 and talks to his mechanic during the spring of 1945. His aircraft (W.Nr. 110559) has the red number '13' painted on the forward fuselage. Bär had scored his 200th victory on 22 April 1944 flying an Fw 190 A-8 while commanding II./JG 1. This aircraft also carried the code 'Red 13'.





LEFT: This aircraft, 'White 7' of Kommando Nowotny, was flown by Ofw. Hermann Buchner during October and November 1944. Buchner continued operations with III./JG 7, claiming the destruction of a B-24 and a P-51 on 3 March 1945. In total he is credited with 58 aerial victories, including 12 with the Me 262. He was awarded the Ritterkreuz on 20 July 1944 and was nominated for the Oak Leaves.

BELOW: A hive of activity as ground crews from Kommando Nowotny prepare their Me 262s for an operational sortie while a group of pilots to the left of the photograph discuss tactics. Standing between them and the hand cart is the access panel to the port turbojet of 'White 11' in the foreground.





LEFT: Ofw. Friedrich Gentsch, an instructor pilot with 7./KG(J) 54, prepares for a flight in his Me 262, 'B3+BC' at Neuburg in March 1945. The aircraft has a diagonal yellow stripe painted on the fuselage sides.



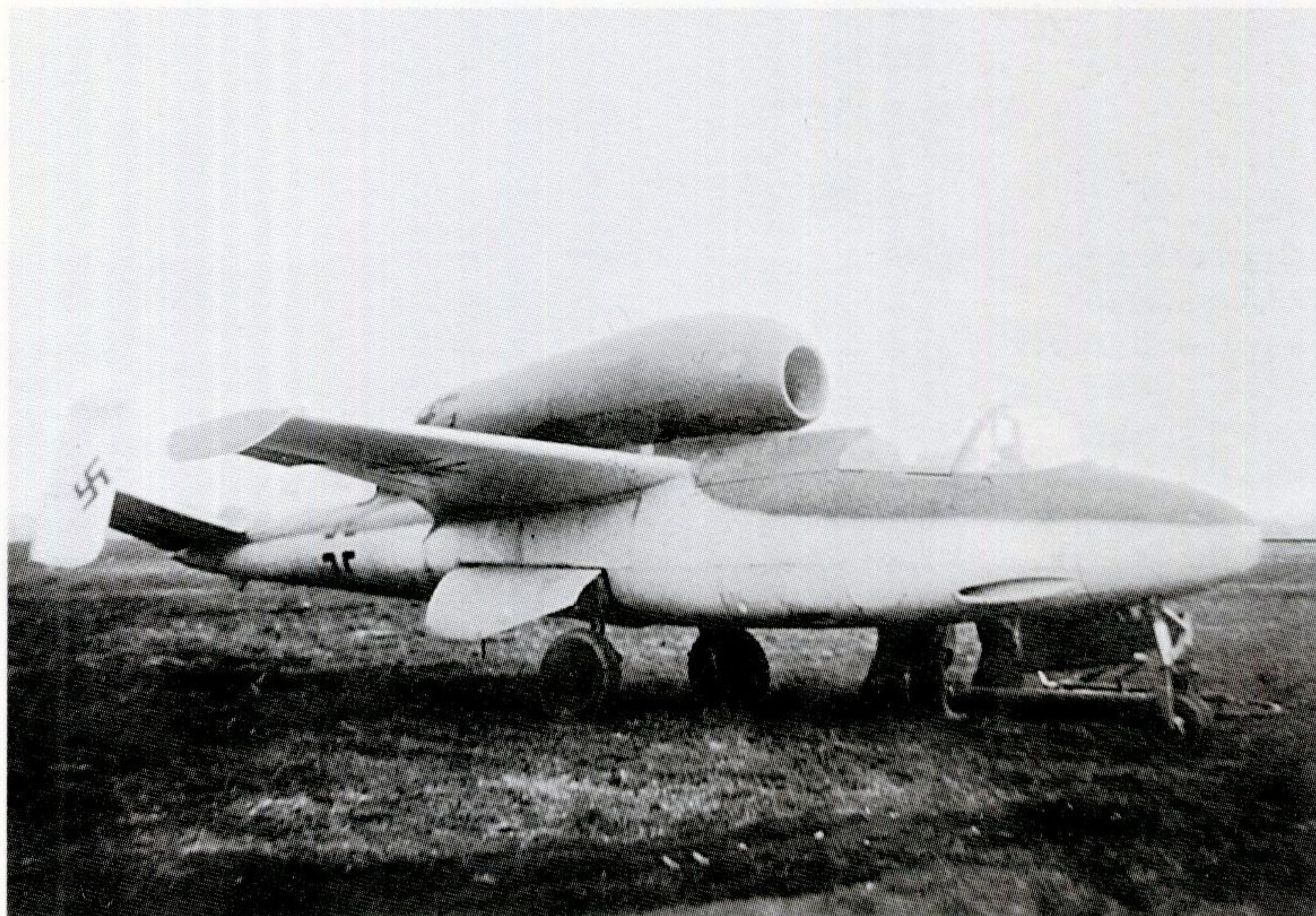
Messerschmitt Me 262 A-1a (W.Nr. unknown) of 7./KG(J) 54 at Neuburg am Donau, March 1945

This aircraft had brownish green (RLM 81) and mid-green (82) uppersurfaces with pale blue (76) beneath. Although it carries the code of II. Gruppe Stab of KG(J) 54, 'B3+BC', it was actually flown by a pilot of the 7. Staffel, Ofw. Friedrich Gentsch. The last two letters of the code 'BC' were painted in bright green (RLM 25).



ABOVE: The Ju 248 V1 was completed in January 1945 and test flown as a glider from February. It was an extensively modified version of the Me 163 with a full vision canopy and a fully retractable undercarriage. The prototype failed to fly on the power of its twin combustion chamber rocket engine before the end of the war.

BELOW: Only a small number of He 162 A-1s were delivered to I./JG 1 at Parchim in February 1945. This variant was fitted with two 30 mm MK 108 cannon. Shortly afterwards production switched to the A-2 version which was armed with two 20 mm MG 151/20 weapons.



Combat Operations – March 1945

“During the subsequent take-off Waldmann and three other pilots collided and crashed, Waldmann being killed. The aircraft then attempted to assemble above the cloud, but this failed and they were forced to make an uncoordinated attack. The result was that only one B-17 and one P-47 were destroyed. Because of the bad weather it was almost impossible for the aircraft to make a safe landing. The JLO (Jäger-Leit-Offizier or Fighter Control Officer) Preusker talked the pilots down one by one. Despite his laudable efforts, many inexperienced pilots crashed. After this operation the Gruppe was considered virtually annihilated.”

Lt. Richard Frodl of I./JG 7 who flew a combat mission on 18 March 1945

On 1 March 1945, the three *Staffeln* of II./JG 400 (7., 8. and 9./JG 400) were ordered to move to Bad Zwischenahn, Wittmundhafen and Nordholz respectively. It was intended that they would operate from these north German bases against four-engined bombers. The I. *Gruppe* was to remain at Brandis to protect the local oil refineries and continue to carry out pilot training. On this day the US Eighth Air Force flew a series of bombing raids on railway marshalling yards in central and southern Germany. One of these was intercepted by Me 262s from I./KG(J) 54 near Ingolstadt just before midday. The *Gruppe* claimed a B-24 and a P-51, but lost two Me 262s. Both pilots were killed.

Two days later, the *Geschwader Stab* and III./JG 7 operated in strength for the first time. 29 aircraft took off to intercept American heavy bombers attacking Magdeburg, Hannover, Hildesheim and Braunschweig. The 9. *Staffel* engaged B-17s between Braunschweig and Magdeburg around 10.15 hours. *Hptm.* Heinz Gutmann, *Lt.* Karl Schnörrer and *Ofw.* Helmut Lennartz each claimed one destroyed, while *Ofhr.* Heinz Russel shot down a P-47 and *Ofw.* Hermann Buchner a B-24 and a P-51. Gutmann's Me 262 crashed south of Waggum and he was killed. Shortly afterwards the *Stab*, 10. and 11./JG 7 engaged the bombers near Magdeburg, but only *Ofw.* Heinz Arnold succeeded in getting through, claiming a B-17 and a P-47. Over Rathenow, *Oblt.* Rudi Sinner shot down a B-24, bringing the *Geschwader's* claims to six bombers and three escorts.

On 7 March, a pair of Me 163s from I./JG 400 attacked a Spitfire reconnaissance aircraft near Chemnitz but without success.

Although the Me 262 fighter had now begun to appear in numbers, problems were already being experienced with fuel shortages. On 10 March, the *Chef TLR* reported that: ‘Owing to the absence of J2 production from the 1st to the 10th of March 1945, during which time consumption amounted to about 2,100 tonnes, the stock of 44,455 tonnes available on 28 February has fallen to 42,350 tonnes on



RIGHT: Taken from a cine film, this photograph shows an Me163 B 'White 14' of I./JG 400 being towed towards its take-off point by its special ground-handling vehicle. In the background railway wagons can be seen the crossing the eastern edge of Brandis airfield.

1944-1945

10 March. Because of the loss of the Böhlen and Magdeburg plants, as a result of enemy action, J2 production is not expected to be resumed for 30 days.'

Meanwhile, ten pilots from 2./JG 1 under Lt. August Hachtel had been sent to Vienna to collect the first He 162s off Heinkel's assembly line on 27 February. It was not until 14 March, however, that the unit suffered its first loss. This occurred during training when Uffz. Tautz was killed when the He 162 M19 (the 19th prototype) he was flying somersaulted on landing and burst into flames. On the same day Lt. Joachim Weber, Lt. Alfred Ambs and Uffz. Ernst Giefing of III./JG 7 each claimed a P-51 destroyed.

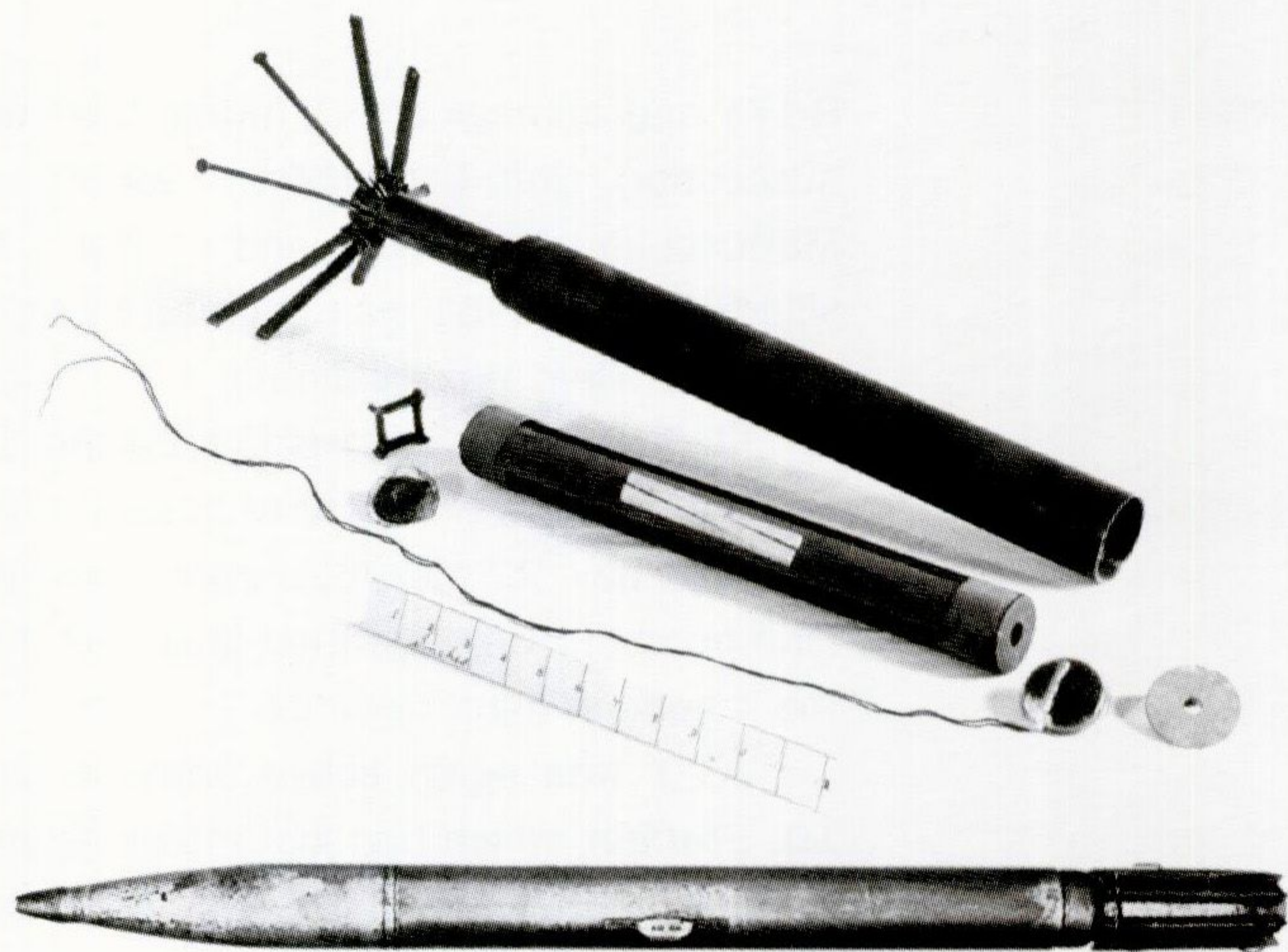
On 15 March, JG 7 were able only to put up a handful of Me 262s owing to serviceability problems. Nevertheless, four claims were made by the German fighters: Lt. Weber two B-24s and Fhr. Ernst Pfeiffer and Ofhr. Walter Windisch a B-17 each. In addition, Hptm. Wilhelm Steinmann of III./EJG 2 claimed a B-17. Next day Uffz. Rolf Glogner of 2./JG 400 severely damaged a Mosquito which managed to crash land in France.

Between 18 and 20 March, JG 7 flew a total of eleven missions. During the first of these a total of 37 Me 262s from the III. Gruppe took off from Parchim to intercept 1,329 US bombers escorted by 632 fighters targeting railway stations and tank factories in the Berlin area. In conditions of hazy cloud cover, 28 jets made contact with the bombers. The first attack, by 10 to 15 Me 262s, was led by Major Weissenberger who claimed two B-17s. Other B-17s were shot down by Ofw. August Lübking, Lt. Rademacher and Lt. Gustav Sturm, with Oblt. Franz Schall claiming a P-51. Six Me 262s led by Oblt. Günther Wegmann, of 9./JG 7 then attacked. Their aircraft were armed for the first time with 55 mm R4M underwing rockets, and the effect of the missiles was devastating. Oblt. Wegmann and Lt. Schnörrer both claimed two bombers while Oblt. Karl-Heinz Seeler and Ofhr. Windisch each destroyed another. The operation was not without cost, Wegmann being forced to bale out and losing a leg while his wingman, Oblt. Seeler, was killed. A total of 13 four-engined bombers was claimed destroyed, plus two probables and six damaged by the German jets. Other successful pilots included Oblt. Kulp who shot down a B-17 and Oblt. Schall who destroyed a P-51.

Further west, I./JG 7's base at Kaltenkirchen in Schleswig-Holstein was shrouded in heavy cloud. Nevertheless, Göring ordered that the Gruppe take off to intercept. First away was a Schwarm of four Me 262s led by Oblt. Hans Grünberg followed by another led by Oblt. Fritz Stehle. Then, as the third Schwarm took off, two Me 262s collided, killing both Oblt. Waldmann and Ofw. Günther Schrey.

On 19 March the Americans dispatched 1,273 bombers to attack synthetic oil plants and jet aircraft assembly plants. Early in the morning a low-level attack was made on Giebelstadt airfield by eight P-51s. Two Me 262 A-1s of I./KG(J) 54 were destroyed. During the afternoon 125 B-24s escorted by 175 P-51s bombed III./KG(J) 54's base at Neuburg, causing severe damage to runways, hangars and buildings. One Me 262 was destroyed and three heavily damaged plus seven lightly damaged. As a consequence of this, Luftflotte Reich issued instructions for I./KG(J) 54 to transfer to Brandis, Zerbst and Alt Lönnewitz.

Later, 45 Me 262s from III./JG 7 scrambled to intercept a formation of B-17s, but only 28 managed to engage due to poor visibility. The jet fighters waded in with their R4M rockets north of Chemnitz, destroying four



ABOVE: The R4M was 812 mm (2 ft 8 ins) long, weighed nearly 4 kg (8.8 lbs) and had a maximum speed of 525 m/sec (1,700 ft/sec). The weapon was normally fired in four salvos of six at intervals of 0.07 seconds from a range of 600 metres (1,968 ft). The missiles diverged slightly after launch to produce a circular pattern with a diameter roughly equal to that of a four-engined bomber. The 0.5 kg (1.1 lb) warhead was impact-fused, which was sufficient to give an excellent chance of bringing down a bomber. Initial trials with the missile began in late October 1944 at the Strelna firing range near Brünn and in early February the first rockets were delivered to Jagdgruppe 10 for testing.



ABOVE: Hptm. Franz Schall (left) as an Oberleutnant while serving with Kommando Nowotny. He was born on 1 June 1918 at Graz in Austria and served first with a Luftwaffe Flak Regiment before transferring to I./JG 52 in Russia in February 1943. He claimed 13 victories in one day on 31 August 1944 and in October was transferred to Kommando Nowotny where he commanded the 2. Staffel, which later became 10./JG 7. He was killed on 10 April 1945 when his Me 262 hit a bomb crater during an emergency landing at Parchim and exploded. He had a total of 117 victories (including about 14 with the Me 262) and had been awarded the Ritterkreuz on 10 October 1944.

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B-17s and damaging four more. The successful pilots included *Lt.* Schnörrer (Wegmann's temporary successor), *Obt.* Schall, *Ofw.* Lennartz and *Ofw.* Arnold. Two Me 262s, piloted by *Ofw.* Heinz-Berthold Mattuschka of 10./JG 7 and *Lt.* Harry Meyer of 11./JG 7 were shot down by P-51s, with both pilots killed. Another P-51 was claimed by *Lt.* Rudolf Rademacher. The I. Gruppe of JG 7 also engaged the bombers, *Gefr.* Heim claiming a B-17 destroyed and *Uffz.* Harald König a probable.

III./EJG 2 was also active on the 19th, its *Kommandeur*, the *Ritterkreuzträger* Major Heinz Bär, shooting down a P-51. Other missions were flown by *Ofw.* Zander and *Lt.* Harbot.

Next day, 22 Me 262s from I. and III./JG 7 took off to intercept a US raid on Hamburg. A total of nine bombers were claimed including three by *Fhr.* Friedrich Ehrig. Three Me 262s were shot down by the American fighter escort.

JG 7 was again active early on the 21st, the *Stab* and 11. *Staffel* at Briest and the 9. and 10. *Staffeln*, which had just moved from Oranienburg to Parchim, attacking a bomber formation in the Dresden area. Although the American escort was heavily engaged, six B-17s were shot down with *Major* Weissenberger, *Major* Ehrler, *Lt.* Schnörrer, *Fhr.* Pfeiffer, *Ofw.* Arnold and *Lt.* Fritz R Müller each claiming one. Despite this success two Me 262s, flown by the veteran *Lt.* Weber of 11./JG 7 and *Uffz.* Kurt Kolbe of 10./JG 7 were shot down, both pilots being killed. Shortly afterwards ten aircraft from I./KG(J) 54, still at Giebelstadt, took off to attack a bomber formation in the Giessen-Marburg area. The Americans lost one B-17 but claimed an Me 262. The pilot, *Uffz.* Willi Ehreke, was killed. Around midday 364 B-24s and 201 P-51s of the US Fifteenth Air Force mounted an attack on Neuburg airfield, destroying 12 of III./KG(J) 54's Me 262 A-1s and damaging a further 38.

On 22 March, the airfields occupied by I. and II./KG(J) 54, were again badly hit by American bombers. A total of eleven Me 262s suffered various degrees of damage at Giebelstadt with a further eight damaged at Kitzingen. Two other Me 262s were destroyed in an abortive attempt to attack the bombers, *Obt.* Hans König of I./KG(J) 54 being killed, while *Obt.* Adalbert Egri of 2./KG(J) 54, baled out.

On the same day, Fifteenth Air Force bombers from Italy raided the Ruhland, Kralupy and Vltava oil refineries. 27 Me 262s from III./JG 7 took off to intercept and became engaged in a running fight with B-17s and their fighter escort around midday. B-17s were claimed by *Major* Weissenberger and *Major* Ehrler of *Stab*/JG 7, *Lt.* Schnörrer, *Ofhr.* Viktor Petermann (who flew with an artificial left arm), *Ofhr.* Windisch, *Fhr.* Pfeiffer, *Ofw.* Lennartz, *Ofw.* Buchner of 9. and 10./JG 7, and *Lt.* Ambts, *Ofw.* Arnold, *Uffz.* Peter and *Ofw.* Lübking of 11./JG 7. *Lt.* Erich Schülte claimed a probable while *Obt.* Schall claimed a P-51 and *Lt.* Alfred Lehner a probable. Three pilots from III./JG 7 were lost in this action; *Fw.* Heinz Eichner, *Ofw.* Lübking and one other.



RIGHT:
Ofw. Friedrich Gentsch of 7./KG(J) 54 walks towards the camera following a sortie with the Me 262. The forward part of the engine cowlings of the aircraft behind him has been changed.

The success of the Me 262 during the previous four days was enough to please Hitler who now saw the Me 262 as: "...the decisive contribution to the entire war."

On 23 March, a few Me 262s from the *Stab* of JG 7 intercepted bombers attacking oil refineries, *Major* Heinrich Ehrler claiming two B-24s and *Ofw.* Gerhard Reinhold a probable B-17. Just afterwards, 14 Me 262s from I./JG 7 intercepted RAF bombers with a Mustang escort which were attacking a bridge over the Weser. Two Lancasters were shot down and a third damaged. One Me 262, probably from I./JG 7, was shot down by an RAF Mustang.

Next day, 31 Me 262s scrambled in two sections to intercept about 250 bombers heading for tank factories around Berlin. The first to arrive were the *Stab* and 11./JG 7 which attacked the bombers near Wittenberg. Five pilots claimed a B-17, *Major* Ehrler, *Lt.* Ambs, *Lt.* Rademacher, *Lt.* Lehner and *Ofw.* Arnold. The second group, made up of Me 262s from 9. and 10./JG 7, then attacked. *Oblt.* Kulp, *Lt.* Sturm, *Oblt.* Schall, *Ofw.* Otto Pritzl and *Ofw.* Buchner each claimed a B-17. Four *Luftwaffe* pilots were shot down, but all survived. Later, about 400 B-17s and B-24s from the US Fifteenth Air Force attacked jet bases at München-Riem, Neuburg, Plattling and Erding. By far the most damage to a jet unit was again at Neuburg where 269 B-24s dropped 563 tons of bombs, destroying 14 Me 262s of III./KG(J) 54 and damaging 36 more.

On 25 March, 25 Me 262s from III./JG 7 intercepted a raid by about 250 B-24s on oil storage depots near Braunschweig, Hannover and Lauenburg. Although the German pilots claimed seven aircraft, five Me 262s were lost. In a separate action *Major* Ottfried Sehrt, *Kommandeur* of I./KG(J) 54, was also injured. Sehrt's place was taken by *Hptm.* Baasner, with temporary command of III./KG(J) 6 passing to *Oblt.* Günther Overdiek.

Bad weather restricted air operations between 26 and 29 March, but this enabled I./KG(J) 54 to transfer from Giebelstadt to Zerbst and II./KG(J) 54 to Neuburg-am-Donau. Despite the weather, 900 B-17s managed to attack a tank factory and an armament plant in Berlin on the 28th. As they returned, they were intercepted by Me 262s from I./JG 7 near Braunschweig and two B-17s were shot down, possibly by *Oblt.* Stehle of 2./JG 7 and *Oblt.* Schuck of 3./JG 7.

The weather improved on 30 March, enabling US Eighth Air Force bombers to fly 1,250 sorties against U-boat pens and the port complexes at Hamburg, Bremen and Wilhelmshaven. Over 30 Me 262s were scrambled by III./JG 7 to intercept, *Lt.* Schnörrer claiming two B-17s and *Ofw.* Petermann one probable. As Schnörrer pulled away, his Me 262 was hit by fire from the bombers and he was then chased and caught by four P-51s near Uelzen. With only one engine operating at full power, he decided to flip his aircraft over onto its back and bale out. Unfortunately, his leg hit the tail and it was so badly broken that it had to be amputated. Around the same time, eight Me 262s from I./JG 7 led by *Major* Erich Rudorffer also intercepted the bombers. *Ofw.* Gerhard Reiher claimed a B-17, but *Fj.Fw.* Heinz Jansen was shot down in flames.

On the last day of March, 428 Lancaster and Halifax bombers attacked submarine pens and the Blohm und Voss aircraft factory at Hamburg. Unfortunately for the RAF they had arrived too late to rendezvous with their Mustang fighter escort. As they neared their target 30 Me 262s from I./JG 7 and eight from III./JG 7 struck. Not having to worry about fighter opposition the jet fighters were able to wreak havoc amongst the British and Canadian bombers. The *Luftwaffe* pilots claimed 13, two short of the number actually lost. Successful pilots were *Oblt.* Franz Schall, *Oblt.* Hans Grünberg, *Lt.* Hans Todt, *Lt.* Friedrich Wilhelm Schenk and *Fhr.* Friedrich Ehrig who claimed two each and *Oblt.* Stürm and *Ofw.* Reiher who each claimed one, plus a probable by *Lt.* Hadi Weihs.

During the month JG 7 had claimed the destruction of 108 four-engined bombers, 22 fighters and a Mosquito. The *Geschwader* lost 22 pilots killed and five wounded.

It was soon to be joined in combat by JV 44 which had been training on the Me 262. By this time it had approximately 20 pilots. At dawn on the 31 March, *Oberst* Steinhoff led a group of seven jets to fly from Brandenburg to their operational base at München-Riem. The flight was completed in the record time of 42 minutes and at an average speed of 685 km/h (426 mph).

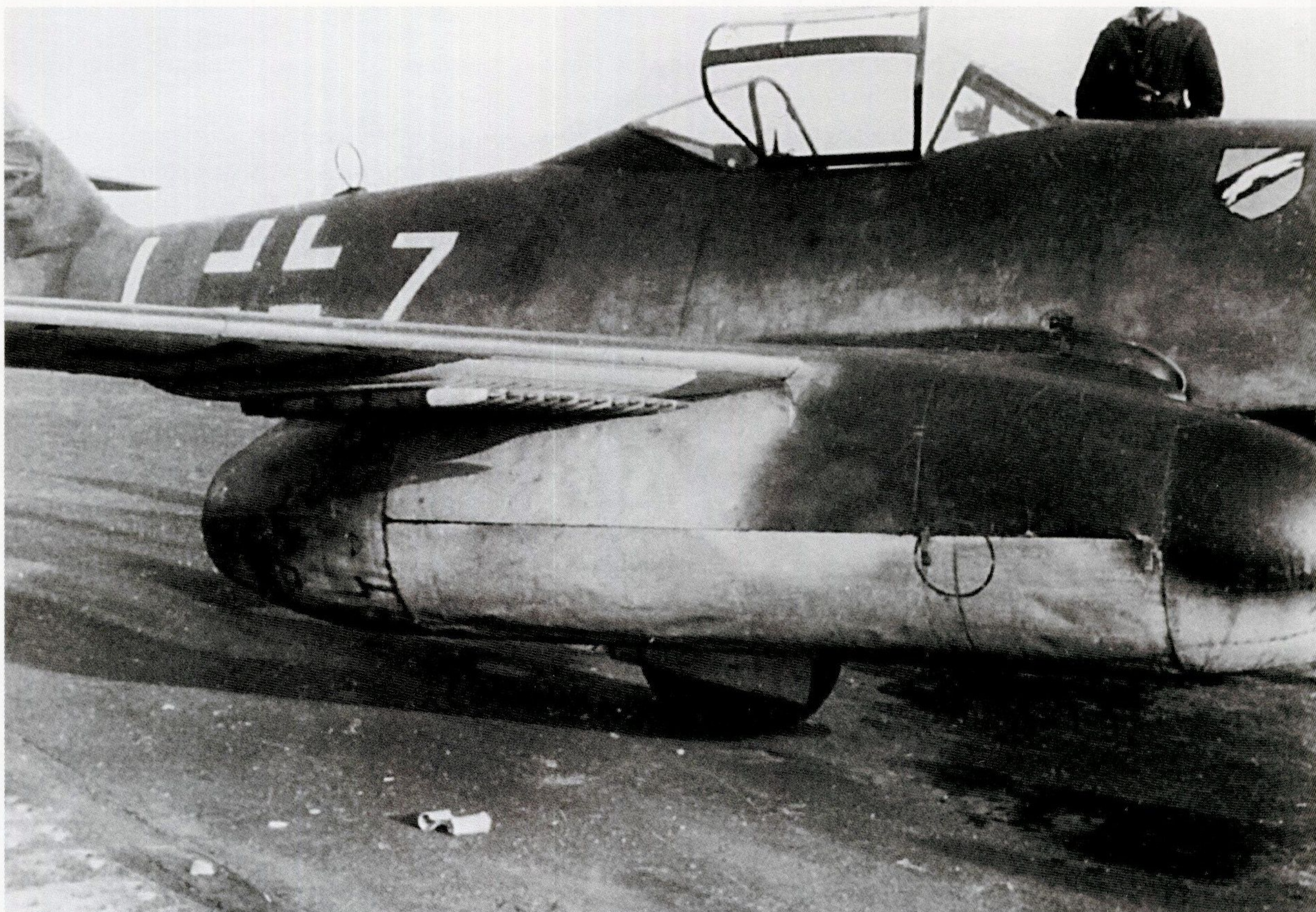
By the end of March III./KG(J) 6 had received five more Me 262s despite an order issued on the 20th ruling out further re-equipment of the unit. In a typical reversal of instructions which was to become more and more common as the Nazi regime struggled in its death throes, the order was countermanded 11 days later. KG(J) 6 was now to become the next unit to re-equip with Me 262. Until this could be completed, it was to train and fly factory protection missions, much like KG(J) 27 was doing with the Bf 109.



ABOVE: Lt. Karl 'Quax' Schnörrer was born on 22 March 1919 in Nuremberg. He joined I./JG 54 and from the middle of 1941 served as Nowotny's wingman, scoring his first victory on 31 December. He suffered severe injuries on 12 November 1943, but after recovering transferred to Erprobungskommando 262 at Lechfeld. He later rejoined Nowotny and then transferred to JG 7, becoming Kapitän of the 11. Staffel on 19 March 1945. On 30 March, his Me 262 was hit by fire from B-17s and he was then caught and his aircraft shot-up by four P-51s near Uelzen. This forced him to bale out, but his leg hit the tail and was so badly broken that it had to be amputated. He claimed a total of 46 victories, nine of them with the Me 262 and was awarded the Ritterkreuz on 22 March 1945.

RIGHT: This Me 262 A-1a of 9./JG 7 was fitted with a wooden rack under each wing loaded with 12 R4M 'Orkan' (Tornado) folding-fin missiles. This devastating 55 mm weapon was first used operationally on 18 March 1945 by six Me 262s led by the Staffelführer, Oblt. Günther Wegmann.

BELOW: Completed at Messerschmitt's Obertraubling plant in late January 1945, this Me 262 A-1a was transferred to Erding where it underwent pre-service testing before being ferried to III./JG 7 by Ofw. Werner Dahlitz of the Flieger-Überführungsgeschwader. It flew its last operational sortie on 25 April when it attempted to intercept a formation of American B-26s over southern Germany but, due to a shortage of fuel, its pilot, Fhr. Hans-Guido Mutke of 9./JG 7, was forced to land at Zürich-Dübendorf in Switzerland at 08:46 hours.



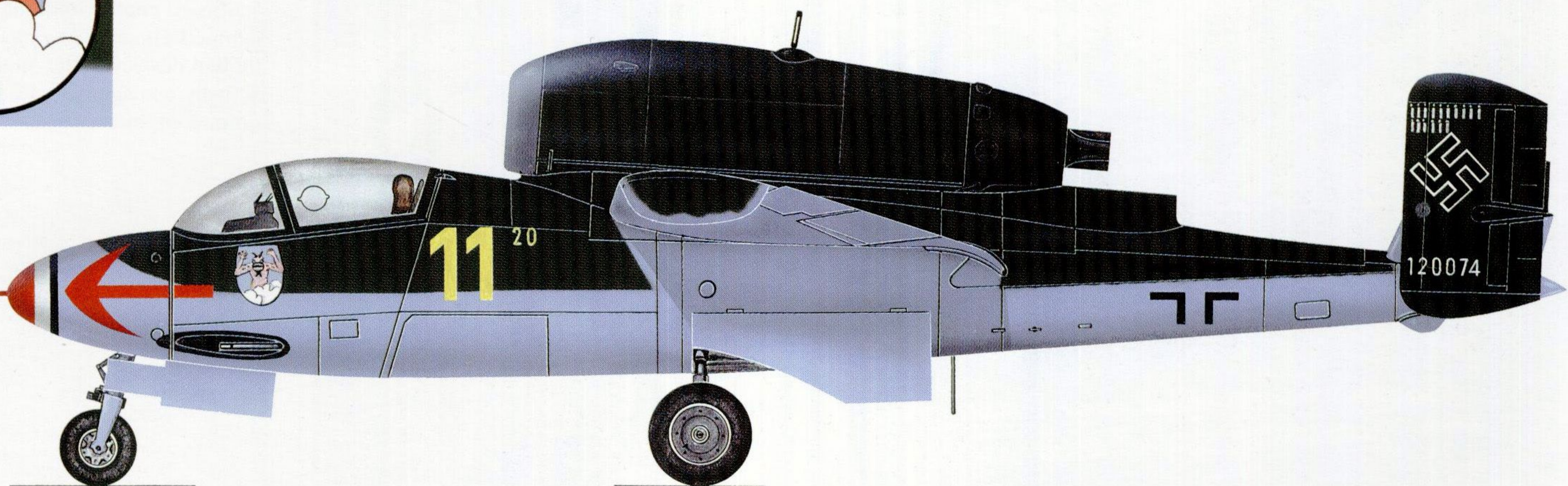


LEFT AND BELOW: Oblt. Emil Demuth posing beside the tail of his He 162 (W.Nr. 120074). Because this aircraft has dark green vertical tail surfaces, the serial number is painted in contrasting white. Above the swastika can be seen 16 white bars representing victories obtained by Demuth before JG 1 converted to the Volksjäger.



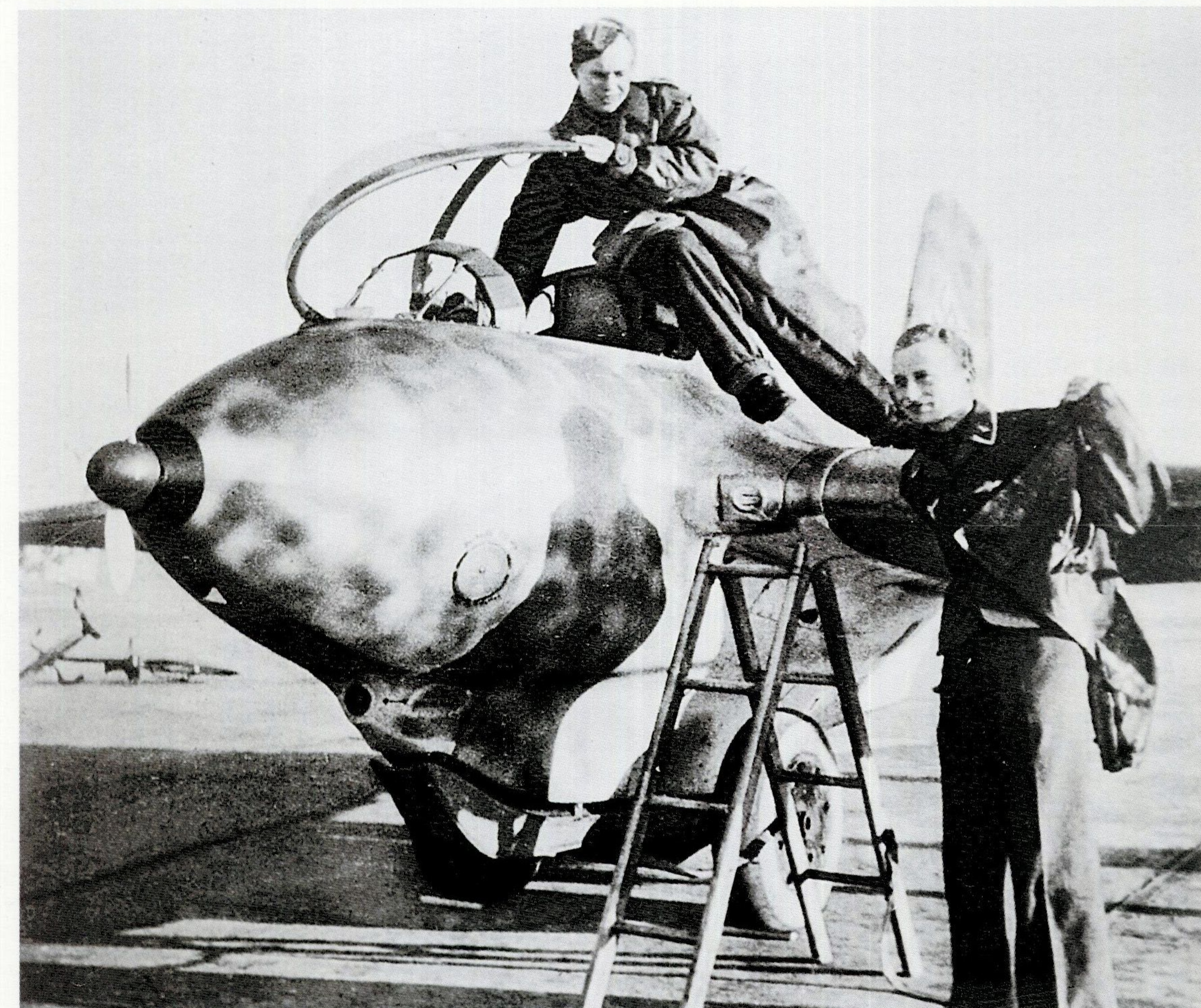
Heinkel He 162 A-2 (W.Nr. 120074) of 3./JG 1 at Leck, May 1945

This aircraft was flown by Oblt. Emil Demuth, Staffelkapitän of 3./JG 1. In addition to the number '11' in yellow, the machine also has a small number '20' on the fuselage side which may have indicated the Kapitän's aircraft (a position temporarily held by Demuth).



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RIGHT: Following each successful flight the rocket engine of the Me 163 was flushed out using a high-pressure water jet. This was done to prevent any inadvertent admixture of the two components of the rocket fuel.



LEFT: On 16 March 1945 Uffz. Rolf 'Bubi' Glogner of 2./JG 400 (right) and Fw. Ernst Schelper intercepted an RAF reconnaissance Mosquito near Leipzig in their Me 163s. Schelper was forced to return to Brandis because he was unable to jettison his take-off dolly, but Glogner opened fire on the British aircraft and scored hits on the starboard engine until his cannon jammed. Glogner was convinced that he had destroyed the Mosquito, but it actually managed to land safely at Lille on one engine.

1944-1945



Messerschmitt Me 262 A-1a (W.Nr. unknown) of 1./KG(J) 54 at Giebelstadt, February 1945

Several of KG(J) 54's Me 262s had pale blue (RLM 76) wave pattern camouflage sprayed over the dark green (RLM 81) uppersurfaces in a random style which was applied over both national insignia and markings.

BELOW: A group of pilots and mechanics of 7./KG(J) 54 in discussion in front of one of their Me 262s, coded 'B3+BH', at Neuburg am Donau in early 1945.



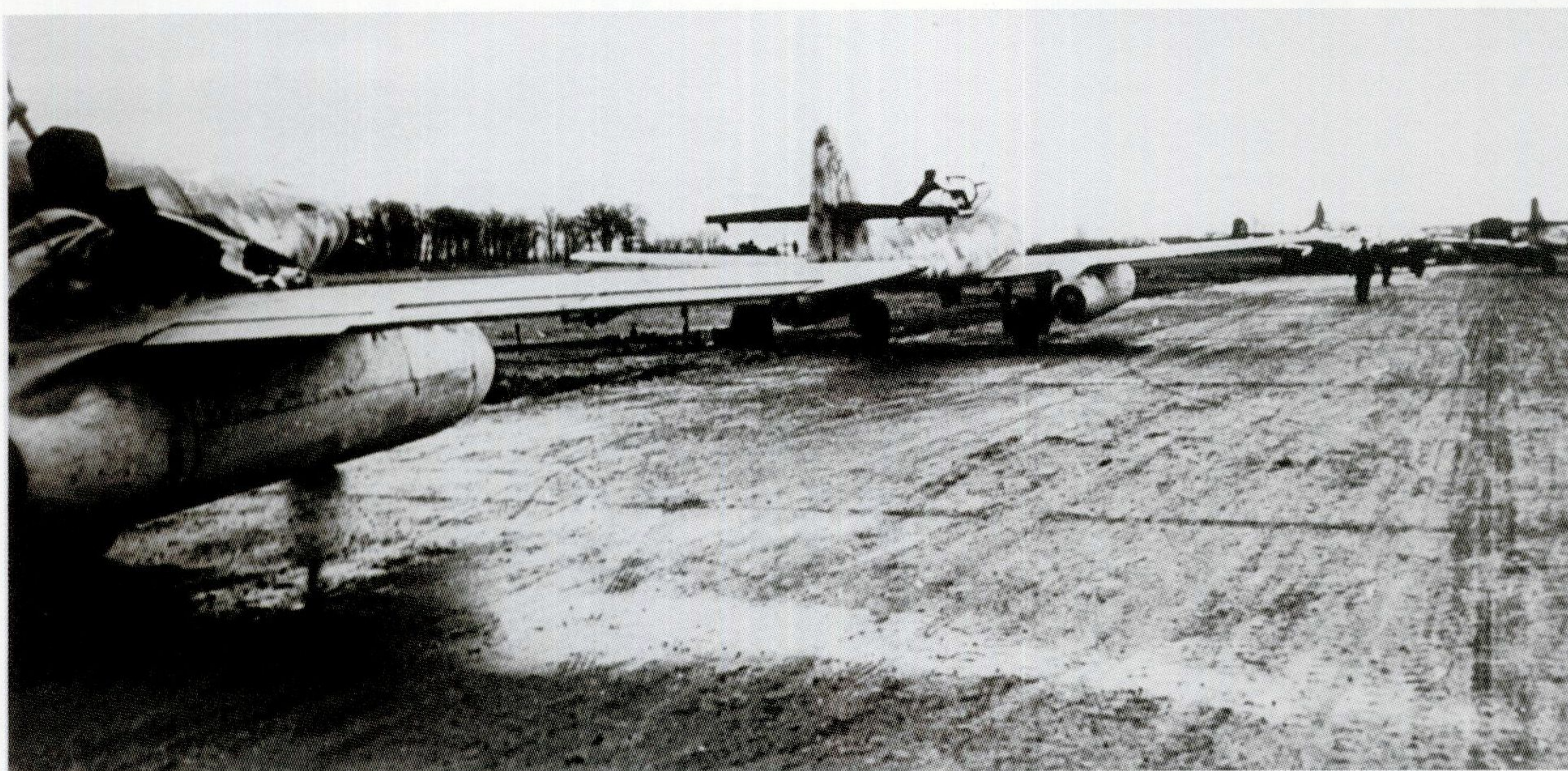
1944-1945



Messerschmitt Me 262 A-1a (W.Nr. 111918) of Stab III./JG 7 at Parchim, spring 1945

Although the Stab of III./JG 7 was based at Parchim during the spring of 1945, this aircraft was discovered by American troops in a hangar near the Dutch border. The dividing line between the upper and lower camouflage colours on the fuselage sides is higher than usually seen on Me 262s of this period.

RIGHT: Captured by American troops near the Dutch border, this Me 262 of III./JG 7 carries a black chevron which would indicate that it may previously have been flown by the Gruppe Adjutant, Oblt. Günther Wegmann.



LEFT: Two Me 262s of 7./KG(J) 54 taxiing along the runway at Neuburg in March 1945. The aircraft in the foreground, 'B3+GR' (W.Nr. 111620) was built at Leipheim in late January 1945. It is known to have been flown by Lt. Günther Eilhardt of 7./KG(J) 54 on 2 February 1945, and Ofw. Friedrich Gentsch six days later. The aircraft was destroyed in an air raid at Neuburg on 23 February.



RIGHT: Mechanics stand on the wing of Ofw. Friedrich Gentsch's aircraft of 7./KG(J) 54 following his return from an operational flight. This Me 262 A-1a carries the code 'B3+BC' with the last two letters painted bright green.



LEFT: The Me 262 A-1a 'Red 13' (W.Nr. 110559) flown by Major (later Obstlt.) Heinz Bär of III./EJG 2 on at least 23 occasions between 25 February and 19 April 1945, during which period he claimed five P-51s, two B-24s, three B-26s, and two P-47s.

Messerschmitt Me 262 A-1a (W.Nr. 110559) of III./EJG 2 at Lechfeld, March 1945

This Schwäbisch Hall-built aircraft was transferred to Neuburg on 8 February 1945. It was assigned to Major (later Obstlt.) Heinz Bär of III./EJG 2 on 25 February and became one of the most successful Me 262s. Bär had his lucky 'Red 13' code number painted on the fuselage sides, this having previously been applied to his favourite Fw 190.



1944-1945



LEFT: This Me 262 A-1a, 'White 4' (W.Nr. 500226) of 1./JG 7 was built at Neuburg-am-Donau in February 1945. It was then transferred to Memmingen where it served for a short time with that airfield's protection Staffel (ISS) before moving to München-Riem. It was there that it may have been fitted with the EZ 42 gunsight. At the end of April 1945 it was assigned to JG 7 at Saaz (Zatec) in what is now the Czech Republic. On 8 May 1945, Oblt. Walter Bohatsch of 1./JG 7 flew the aircraft to Dedelstorf 67 km north of Braunschweig and surrendered it to US troops.

RIGHT: This Me 262 of 9./KG(J) 54 was discovered at München-Riem at the end of the war. The aircraft had the unit's Totenkopf ('Death's Head') badge painted in black on a yellow shield below the cockpit.



Messerschmitt Me 262 A-1a (W.Nr. unknown) of 9./KG(J) 54 at Neuburg am Donau, April 1945
Towards the end of March 1945, KG(J) 54 adopted fighter type markings, these replacing the old four-character code system. This aircraft carries the yellow number '3' and vertical bar of the III. Gruppe with the blue and white chequered rear fuselage band adopted by the Geschwader at this time.



1944-1945



Messerschmitt Me 262 A-1a (W.Nr. 110800) of 3./JG 7 at Fassberg, May 1945

Flown by Uffz. Engler of 3./JG 7, this aircraft was repaired several times. It has brownish green and mid-green (RLM 81 and 82) mottling on the fuselage sides and fin and rudder, with the upper surfaces in a splinter pattern of the same colours. The undersides were pale blue (RLM 76). Two 450 mm wide unit identification bands in blue and red were painted around the rear fuselage.



LEFT: On 14 February 1945 Uffz. Günther Engler of 3./JG 7 claimed the destruction of a B-17 between Lübeck and Neumünster with this Me 262 A-1a, then coded 'Yellow 9'. The aircraft was damaged nine days later in a crash landing. After repair it was transferred to 2./JG 7, where it again suffered minor damage when its nose gear collapsed on 2 March. On 8 May the aircraft, then with Gefechtsverband Hogeback, flew from Saaz (Zatec) in Czechoslovakia and landed at Fassberg where Engler surrendered it to British forces. It received the Air Min number 51, and the RAF serial VK893. On 27 May 1945, W/Cmdr. Schrader of 616 Squadron took off to transfer the aircraft from Fassberg to Schleswig but its nose gear failed to extend on landing at Lübeck. Some sources say it was repaired but it was eventually scrapped.

BELOW: A line-up of seven Me 262s from JV 44 at München-Riem airfield in April 1945. Most of the unit's aircraft had simple dark green upper surfaces with pale blue beneath.



1944-1945



LEFT: Oberst Günther Lützow (left) in conversation with Oberst Johannes Steinhoff while both pilots were serving with JV 44. Steinhoff was born on 15 September 1913 at Bottendorf in Saxony. He joined the German Navy in 1934 as an officer cadet before transferring to the Luftwaffe in 1936. At the outbreak of war he was Staffelführer of 10./JG 26 flying experimental night fighter sorties from Cologne-Ostheim. He was transferred to JG 52 in February 1940, commanding this Geschwader's 4. Staffel during the Battle of Britain and the invasion of the Soviet Union. He took over II./JG 52 in February 1942 and scored his 100th victory on 31 August 1942. In March 1943 he was posted to North Africa to take over command of JG 77 and was appointed the first Kommodore of JG 7 in November 1944. Following the so-called 'fighter pilot's mutiny' he transferred to JV 44 but suffered dreadful burns in a crash on 18 April 1945. He was awarded the Ritterkreuz with swords on 28 July 1944 and claimed a total of 176 victories, six with the Me 262. In 1952 he returned to the Bundesluftwaffe and within four years became Deputy Chief of Staff, Operations. He was promoted to Brigade-General in 1958 and to Generalmajor in 1962. He retired in 1972 to his home in Bonn where he died in 1994.

Combat Operations April-May 1945

'The war ended for the remnants of JG 400 at 16.00 hours on 8 May 1945 at Duppau. We received our discharge papers and the remaining vehicles were divided among us so we could make our own way through Germany. We destroyed our weapons and within the hour, small groups of us had set off in the same direction. On the following day, I managed to escape the US forces at Stollberg near Chemnitz by hitching a ride in a German army lorry. Six weeks later, my family and I reached Cologne.'

Fw. Hans Hoever of I./JG 400 in a letter written after the end of the war

The month of April began with six Me 262s from I./JG 7 being damaged at Kaltenkirchen in attacks by American B-26s. These prompted the OKL to order the transfer of the *Gruppe*, 1./JG 7 going to Brandenburg, 2./JG 7 to Burg-bei-Magdeburg and 3./JG 7 to Oranienburg. Despite this setback, the *Gruppe* intercepted twenty B-17s near Stendal and claimed one destroyed. *Uffz.* Köster of 11./JG 7 also shot down a lone Spitfire.

Next day, *Uffz.* Günter Blütchen of 7./KG(J) 6 crashed on a training flight, one of a number of Me 262s lost by the unit. On the 3rd, 14 Me 262s from KG(J) 54 operated against RAF Lancasters while JV 44 flew its first operation when *Lt.* Fährmann and *Uffz.* Eduard Schallmoser took off for a patrol over München at 17.55 hours. No contact was made with the enemy and the two pilots returned safely.

Jet fighters were heavily engaged on 4 April when 939 bombers attacked five airfields and two landing grounds in northern Germany plus the U-boat yards at Hamburg and Kiel. Against the bombers, the *Luftwaffe* put up a total of 48 Me 262s in three different sorties of 20, 18 and 10 aircraft. The first clash with American fighters came around 09.15 hours, resulting in the loss of several Me 262s, including that piloted by *Major* Sinner. Suffering from severe burns to the head and hands, Sinner was taken to hospital. His place as *Kommandeur* of III./JG 7 was taken by *Major* Wolfgang Späte, a veteran pilot of both the Me 262 and Me 163. After claiming a P-51 destroyed, the *Kapitän* of 10./JG 7, *Oblt.* Franz Schall, also had to bale out near Parchim, but was unhurt. A total of four Me 262s was claimed by the 339th FG in this action, the other Mustang pilots being *Lt.* Robert C. Havinghurst, *Lt.* Nile S. Greer and *Capt.* Harry R. Corey. In a second Me 262 attack, over Hamburg, four more jets were destroyed, but German victors included *Lt.* Schenk, *Lt.* Rademacher, *Fw.* Pritzl and *Fhr.* Pfeiffer. One Me 262 was shot down by a P-51. Another group of jets from III./JG 7, which had assembled near Stendal, intercepted American bombers south of Bremen, shooting down three.

JG 7 was joined by 14 Me 262s from I./KG(J) 54 who claimed two B-17s north of Hannover. During the actions, the jet units destroyed nine American aircraft with three more damaged. Apart from the claims already mentioned, *Major* Weissenberger shot down a B-17, *Lt.* Stehle and *Gef.* Heim of I./JG 7 a B-17 each and *Lt.* Weihs a P-47. JG 7's losses were severe, totalling seven Me 262s destroyed, five missing and five damaged. Known losses included *Uffz.* Otto Heckmann of 11./JG 7 who was killed near Leipzig,

Further south, two Me 262s from JV 44 piloted by *Lt.* Fährmann and *Uffz.* Schallmoser were scrambled to intercept several reconnaissance Lightnings. Schallmoser attacked from head-on, but the closing speeds were such that he rammed the American aircraft. The latter crashed but Schallmoser was able to return safely with light damage to his Me 262.

On 5 April, JV 44 flew its first operation against four-engined bombers, Steinhoff leading four Me 262s to intercept an American incursion between München and the Danube. The other pilots were *Major* Walter Krupinski, *Lt.* Fährmann, and *Ofw.* Rudolf Nielinger. One B-17 was shot down and two more damaged, but Fährmann had to bale out after both engines of his aircraft failed. Next day *Major* Heinrich Ehrler of the *Stab*/JG 7 was killed, possibly after ramming a B-17⁴.

Almost 60 Me 262s from III./JG 7 and I./KG(J) 54 supported the mass attack on a US bomber formation by *Schulungslehrgang Elbe* on 7 April. Two bombers were claimed by pilots from III./JG 7, a B-17 over Parchim by *Ofw.* Göbel and a B-24 near Bremen by *Uffz.* Schöppler. Later two P-51s were shot down by *Ofhr.* Neumann and *Fhr.* Pfeiffer. Several Me 262s were claimed by the US fighter escort but the only known loss was 'White 8' piloted by *Hptm.* Werner Tronicke, *Staffelkapitän* of 1./KG(J) 54, who baled out near Hagenow and was injured.

Because of the war situation, *Luftflotte Reich* ordered, on 8 April, that only three *Geschwader*, JG 7, KG(J) 54, and JG 300, were to be equipped with the Me 262 for the present. I. and II./KG(J) 6

“I was constantly shot at by all eight Mustangs...”

Rudolf Sinner, III./JG 7

On my flight of 4 April, I took off from Parchim for an attack on a bomber formation. Before take-off, hostile fighters were reported at 8,000 metres (26,250 ft) over the airfield. The altitude was probably over-estimated because the noise of the aircraft seemed much closer. I now think that the fighters were close to the cloud cover at 400 metres (1,312 ft).

In one and a half circuits over the field, I gathered seven aircraft under the cloud cover while the others were behind us. Through a hole in the cloud cover, I went up and immediately spotted in the sun to my left and above me, four aircraft which I presumed were Thunderbolts. I banked steeply towards them since I could not move away from them in my inferior position. The Thunderbolts turned away sharply to gain a counter course. In my attempt to go after them, I observed four Mustangs chasing a single Me 262. I didn't want to use my rockets because it would have set a bad example to the rest of my *Gruppe*. In my attempts to get away from the Mustangs, I saw four more Mustangs above me on my right diving for the attack. I curved through them and was shot at from behind in doing so. It was impossible to climb or dive or increase speed because of the closeness of the ground.

I was constantly shot at by all eight Mustangs. In attempting to climb for the clouds I received my first hit. I decided to shoot my rockets off before I went into the clouds to gain speed as two Mustangs were following some distance behind. My rockets wouldn't fire. While I was working on the switch, a strong smell of smoke came into the cockpit. I was hit again and I saw that the left wing was burning. The fire spread to the cockpit immediately. After a few defensive manoeuvres I decided to bale out.

I left the cockpit at a speed of 700 km/h (435 mph) without hitting the rudder. I discovered immediately that my parachute was torn open and my right leg was tangled up in the harness and risers. It was my feeling that the parachute had separated from the belts and harness. Since I was close to the ground, I pulled the rip-cord after three somersaults and saw to my amazement that the parachute had opened. I was attached to the parachute by the left belt only. I landed on my thigh with my left arm hanging in the parachute risers, in a freshly ploughed field. Despite trying to rid myself of the parachute I was still attached to it, and was dragged some 20 metres (65 ft) into a barbed wire fence.

Two Mustangs shot at me while I was lying in the barbed wire. I didn't move as long as they could see me. When they circled to begin a new attack, I ran about 25 steps to a furrow and hid. They continued shooting at the parachute, but their shots weren't very accurate. Finally, and probably because of the flak at Redlin, they fell away. I received first aid from the men of a radar squadron and the doctor of Jagdgruppe 10.



4. It is possible that this action took place two days earlier.

and KG(J) 55 were to be disbanded. On the same day 15 Me 262s from I./JG 7 intercepted an RAF Lancaster formation bombing Hamburg, *Oblt.* Stehle from 2./JG 7 claiming one. *Lt.* Weihs also claimed a P-38. *Fw.* Geisthovel of III./JG 7 intercepted a formation of four P-51s near Cottbus and claimed two with the aid of the EZ 42 gunsight. An RAF bombing raid on Parchim meant that I./JG 1, which was undergoing training on the He 162, was forced to transfer to Ludwigslust. Ten pilots from the 3. *Staffel* had only just picked up a batch of new jets from Heinkel's Rostock factory. On the same day II./JG 1 at Garz was also ordered to move to Rostock to begin conversion from the Fw 190 to the new fighter.

Next day, the US Eighth Air Force bombed ten jet airfields in southern central Germany, including Neuburg, München-Riem, Lechfeld, Leipheim, Memmingen and Landsberg. Most damage was caused at Neuburg-am-Donau where 65 B-17s with fighter escort dropped 173 tons of bombs on the airfield, still occupied by III./KG(J) 54. At München-Riem, 228 B-17s released 550 tons of bombs, badly damaging six Me 262s from JV 44. Lechfeld was also heavily damaged in the attacks. Shortly afterwards JG 7 scrambled 29 Me 262s to intercept some 50 RAF bombers attacking shipyards, U-boat pens and harbour facilities around Hamburg. A Lancaster was claimed by *Oblt.* Schall of III./JG 7 and *Uffz.* Günther Engler, *Lt.* Rudolf Zingler and *Gef.* Paul Müller of I./JG 7. *Lt.* Fritz R Müller of 11./JG 7 also claimed a P-47. Only one Me 262 is known to have been lost in combat on this day, that piloted by *Uffz.* Köhler of 3./JG 7 who was killed.

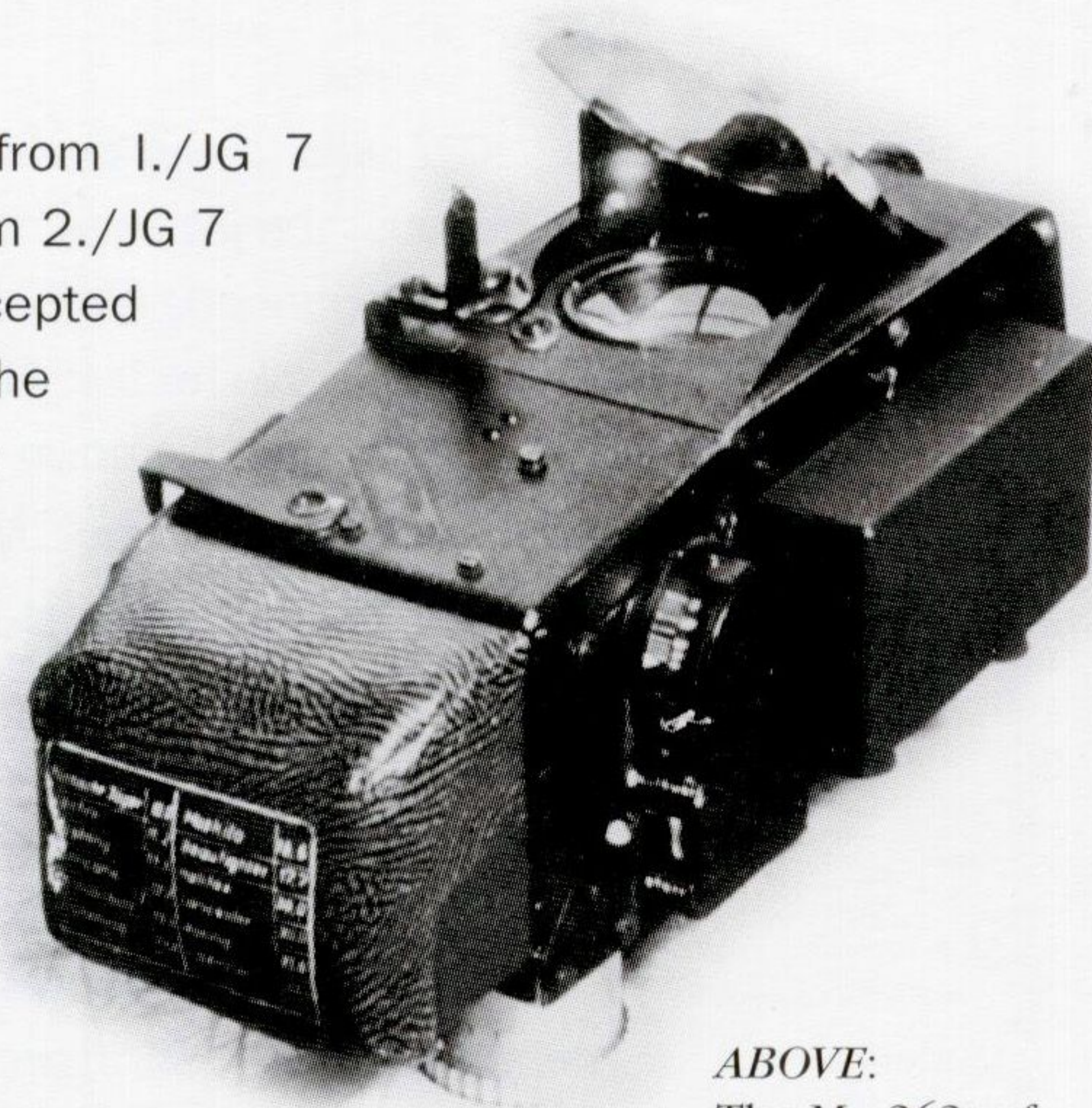
On 10 April the *Luftwaffe* flew what proved to be the largest number of jet fighter sorties flown in one day during the war. US bombers had targeted jet airfields in northern Germany including Brandenburg-Briest, Burg-Magdeburg, Oranienburg, Rechlin, Lärz, Zerbst, Neuruppin and Parchim. The first unit to intercept was 2./JG 7 from Burg led by *Oblt.* Stehle. Minutes later, the Americans struck the airfield, unloading hundreds of tons of bombs in a 20 minute assault which prevented it from being used again until the end of the war. Ten Me 262s were destroyed on the ground including three from Stehle's *Staffel*. Shortly afterwards, just as 9. and 10./JG 7 took off from Parchim, they were bounced by P-51s and *Ofhr.* Windisch and *Uffz.* Louis-Paul Vigg were shot down. Both pilots survived with severe injuries. Fifteen minutes later the American bombers arrived at Parchim but, because of the poor visibility, most of their bombs fell in open ground. As they returned, six Me 262s gave chase but were intercepted by P-51s and a violent air battle took place. One Me 262 lost was that piloted by the veteran *Oblt.* Schall, *Kapitän* of 10./JG 7. He died when his jet crashed into a bomb crater at Parchim. He had 14 jet kills. Thirty more of them from JG 7 then took off from Oranienburg, Lärz and Brandenburg, several Me 262s being lost.

At Zerbst, occupied by I./KG(J) 54, 222 tons of bombs were dropped. The unit had a strength of 37 Me 262s at this time. Three of these, piloted by *Lt.* Paul Pallenda, *Lt.* Bernhard Becker of 2./KG(J) 54 and *Lt.* Jürgen Rossow of 3./KG(J) 54, were lost, Pallenda being killed and the other two injured. In total JG 7 and I./KG(J) 54 lost five pilots killed and 14 missing. Apart from those already mentioned, other pilots killed included *Oblt.* Walter Wagner, *Kapitän* of 3./JG 7, *Oblt.* Walther Wever, *Gef.* Heim and *Uffz.* Köhler. In addition, *Oblt.* Walter Schuck of 3./JG 7, baled out. American successes were such that they described the day as "the great Jet massacre".

The day's severe damage to the jet bases in northern Germany forced most units to move south. The plan was for the *Stab* of JG 7 and I./KG(J) 54 to transfer by way of Brandis (near Leipzig) and Alt Lönnewitz (north of Dresden), to Saaz (now Zatec) and Prag-Rusin respectively. I. and III./JG 7 were also to be temporarily assembled at Brandis and Alt Lönnewitz, but they never appeared at the former base. The *Stab* of KG(J) 54 went to Fürstenfeldbruck near München.

The 2./JG 400 was also active on 10 April, *Lt.* Fritz Kelb's Me 163 making an attack on a Lancaster formation with the radically new 50 mm SG 500 *Jägerfaust* upward firing weapon. Passing just below the bomber, the weapon was automatically triggered which blasted it from the sky. Also on 10 April, I./JG 400 received orders to begin conversion to the Ho 229 all-wing jet fighter, although plans for the production of this revolutionary aircraft were far from ready. By the 14 April, conditions at Brandis were such that all remaining Me 163s were destroyed and most of the remaining personnel ordered to transfer to the German Army. Many of the remaining aircraft from II./JG 400 were captured when the unit surrendered to British troops at Husum in May 1945.

By now, not only were many airfields becoming untenable but the shortage of fuel was worsening. General Josef Kammhuber, who acted as Göring's personal 'General Plenipotentiary for Jet Aircraft'



ABOVE:
The Me 262s of both JG 7 and JV 44 were equipped in small numbers with the Zeiss EZ 42 Adler (Eagle) gunsight designed to automatically compute the deflection angle required to hit a target when the fighter was manoeuvring. However, it proved difficult to use and calibrate.

BELOW: Georg-Peter Eder was born on 8 March 1921 at Oberdachstetten. His first operational fighter unit was JG 51, with which he served until joining JG 2 in December 1942. He was appointed Kapitän of 6./JG 1 in February 1944 and Kommandeur of II./JG 26 in September of the same year. Soon afterwards, he was transferred to Kommando Nowotny to take command of the 3. Staffel and its successor, 11./JG 7. He was injured on 15 February 1945, but returned to operations before the end of the war. He was awarded the Ritterkreuz with Oak Leaves and claimed at least 78 aerial victories.



ordered: 'Attention is drawn to the urgent necessity for the utmost economy in the use of J2. Waste must not continue. Aircraft are not to taxi to parking places under their own power. Formation commanders to be instructed under threat of court martial.'

On 12 April, Ofw. Franz Gapp of 8./KG(J) 6 flew the unit's first operation to intercept a P-38 reconnaissance aircraft. Two days later III./JG 7, in the midst of transferring from Alt Lönnewitz to Prag, reported 22 Me 262s on hand. As the Gruppe took off the Me 262 piloted by the Kapitän of 11./JG 7, Oblt. Erwin Stahlberg, was shot down by an American P-51. To make matters worse, weather conditions forced the unit to land at Plattling rather than Prag. A second Me 262, this time from II./JG 7, was shot down by another P-51 near Riesa. The pilot, Fw. Arno Thimm, baled out. This was possibly the first operational loss by this Gruppe.

The period that followed, right up to the end of the war, was marked by the issuing of conflicting commands, edicts and orders from various Luftwaffe commands and Hitler's plenipotentiaries. For example, the Luftwaffe order that JG 7 should transfer to airfields in Bavaria was countermanded by SS-Obergruppenführer Hans Kammler, the Führer's 'Plenipotentiary for Jet Aircraft' on 15 April. He directed that the unit should move to bases at Eger, Saaz and Prag-Rusin from where it could continue its defence of Berlin. Consequently, JG 7's remaining aircraft left Alt Lönnewitz and Plattling for Prag where they were joined by the Me 262s from I./KG(J) 54 and III./KG(J) 6. By the end of the day there were about 60 Me 262s at this airfield.

Apart from conventional bases, preparations were also in hand for the jets to operate from autobahns, the grass median strips of which were to be concreted over. By 17 April all the Me 262 fighter units had arrived at their new bases; JG 7, I./KG(J) 54 and III./KG(J) 6 were now at Prag-Rusin, JV 44 at München-Riem, Stab/KG(J) 54 at Fürstenfeldbrück and III./KG(J) 54 at Neuburg. Also at this time, both JG 7 and JV 44 were making increasing use of the R4M rocket, Adolf Galland shooting down two B-26s with this devastating weapon on 15 April.

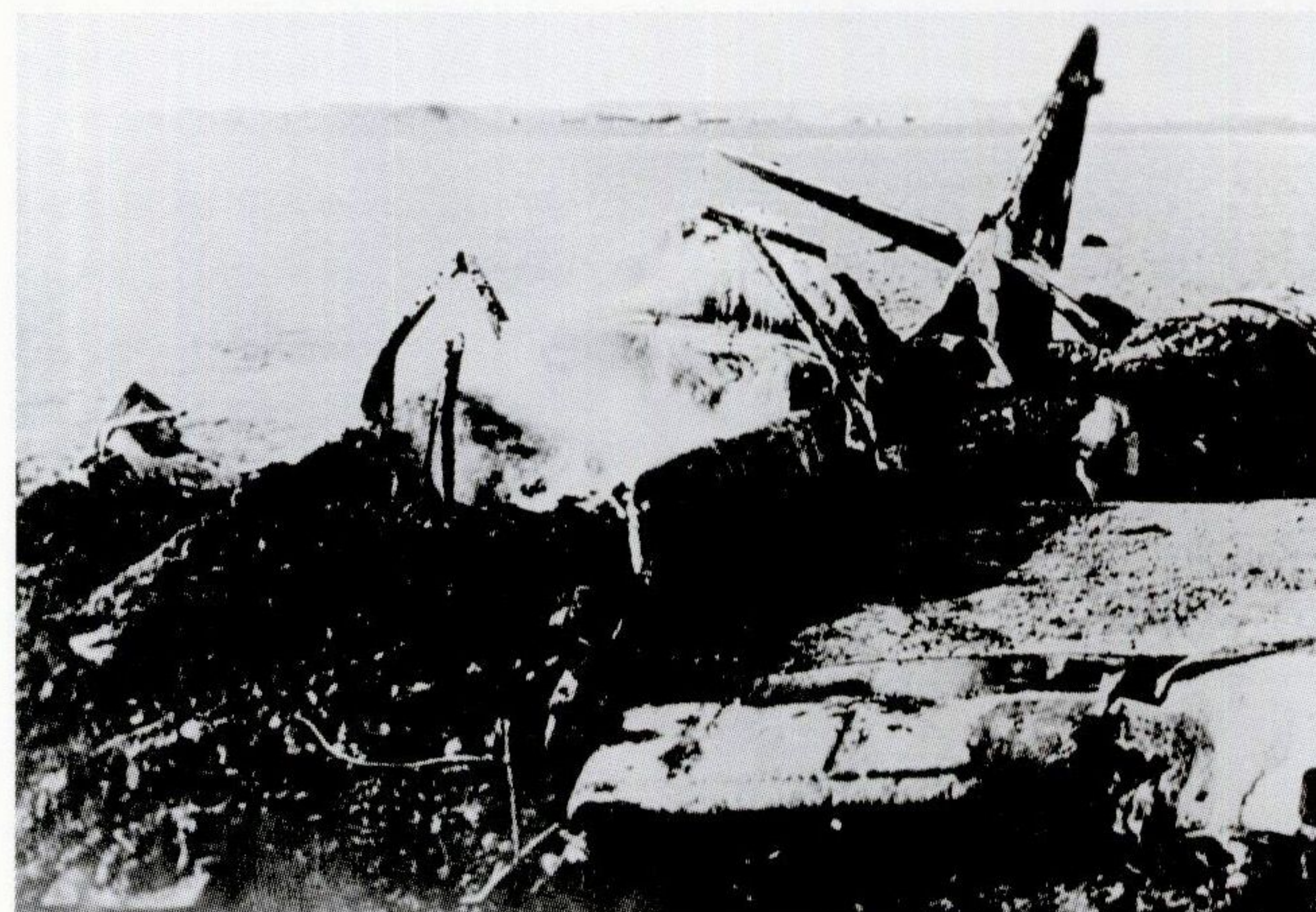
Advancing Allied troops forced I./JG 1 to move again on 15 April, this time to Leck in Schleswig-Holstein. The speed with which the He 162 had been introduced meant that it handled with extreme sensitivity and, at one time, pilots were ordered not to fly at over 500 km/h (310 mph) and above 3,000 m (10,000 ft) or for longer than 15 minutes. Following modification and testing the He 162 proved to be a relatively pleasant aircraft to fly in the hands of an experienced pilot, but caution still had to be exercised, particularly in the application of the rudder controls. However, by 1945, the majority of the Luftwaffe's fighter pilots were inexperienced youngsters, and the relatively few of them who flew the He 162 found it more than a handful to master, frequent accidents being experienced during training. As for the plan to train hundreds of teenage members of the Hitler Youth to fly the aircraft, this would have proved little short of unrealistic lunacy.

On 17 April about 20 Me 262s from JG 7 flew operations, Major Späte, Oblt. Bohatsch and Oblt. Stehle each claiming a bomber in the Dresden area. Around Prag, Lt. Fritz R. Müller, Ofw. Schöppler and Ofw. Pritzl both claimed kills and a B-17 was shot down by Hptm. Eder near Berlin. The unit did not have it all its own way though, a Schwarm of four Me 262s from JG 7 led by Oblt. Hans Grünberg all being shot down. Only the leader escaped with his life. Further south, seven Me 262s from JV 44 were in action, claiming one enemy aircraft destroyed and one probable. One of these may have fallen to Uffz. Schallmoser who rammed a B-17. He baled out safely.

Next day, six Me 262s from JV 44 led by Galland with Oberst Steinhoff heading the second flight of three,⁵ prepared to take off to intercept American bombers near Regensburg. As it neared take-off speed, Steinhoff's Me 262 hit a small bomb crater, crashed and burst into flames. He survived, but was terribly burnt.

Just after this, the Kommodore of KG(J) 6, Oberst Hermann Hogeback, was ordered to take command of all jet units in the greater Prag area and combine them into a battle group to be known as Gefechtsverband Hogeback. He now had effective control of JG 7, I./KG(J) 54 and III./KG(J) 6, all based at Prag-Rusin.

BELOW: On 18 April 1945 the Me 262 piloted by Oberst Johannes Steinhoff of JV 44 hit a bomb crater on take-off, crashed and caught fire with the result shown here. Steinhoff survived, but was badly burnt which required long-term plastic surgery, much of which was carried out by British doctors. During the war, Steinhoff flew over 900 missions and claimed 176 victories, six of them with the Me 262.



5. JV 44 usually flew in flights of three aircraft while JG 7 used the more familiar Schwarm of four.

1944-1945

BELOW: Three of I./JG 1's most important command personnel pose for a photograph in front of their He 162s at Leck in May 1945. From left to right are: Hptm. Wolfgang Ludewig, Staffelkapitän of 2./JG 1; Major Werner Zober, Kommandeur of I./JG 1; and Oblt. Emil Demuth, Kapitän of 3./JG 1.

By now, the fuel situation around the area of the Czech capital was worsening, Kammler informing Göring on 21 April that: '...it is impossible for the jets to remain in the Prag area because only enough fuel is available for one operation. Because re-supply by rail cannot be guaranteed, and supply by tanker lorry is no longer possible, these stocks will have to be used for transfer. Transfer to northern Germany is now impossible because of the destruction of the servicing and supply organisation.' Next day it was reported that there were 34 cubic metres (1,200 cu. ft.) of J2 fuel at Prag-Rusin and only 20 cubic metres (700 cu. ft.) at Prag-Letnán. In contrast there were 218 cubic metres (7,700 cu. ft.) of J2 fuel at Lechfeld in Bavaria.

On 23 April, JV 44 established its headquarters in a converted girls' school near München. Next day, it flew two sorties against B-26 formations over southern Germany. The first was by eleven aircraft, the second by five. The action resulted in the destruction of two B-26s and one P-51 with a further three B-26s probably destroyed. Two *Luftwaffe* pilots were reported missing. The first was an unidentified *Oberfähnrich*, the second the



ABOVE: Oberst Günther Lützow (left) shares a joke with Gen.Lt. Adolf Galland of JV 44. Lützow was born on 4 September 1912 at Kiel, and later served with the Condor Legion in Spain. He then commanded I./JG 3 before becoming Kommodore from August 1940. He claimed his 100th victory on 24 October 1941. In 1942 he was transferred to various staff positions until Galland requested him to join JV 44 shortly after it was formed. He was reported missing near Donauwörth on 24 April 1945. At that time he had a total of 108 victories and had been awarded the Ritterkreuz with Swords on 11 October 1941.

widely respected *Oberst* Lützow. He was lost near Donauwörth, but his body was never found. By this time JV 44 had established a small unit of Fw 190 D-9s and D-11s under *Lt.* Heinz Sachsenberg to protect its airfield at München-Riem from marauding enemy fighters. To avoid German anti-aircraft gunners from mistaking them for enemy fighters, the undersurfaces of their Fw 190s were painted a bright red with white stripes.

III./KG(J) 6 flew a very successful mission on the 24th, claiming seven enemy aircraft including two B-17s by *Ofw.* Franz Gapp of the 8. *Staffel*. One Me 262 was shot down south-west of Prag and two others were damaged. Near Dresden, a *Schwarm* of Me 262s from I./KG(J) 54 shot down two other American aircraft. Near

Warnemünde, the *Kommandeur* of I./JG 1, *Hptm.* Paul-Heinrich Dähne, was killed when his He 162, which had only just taken off, skidded in a turn, somersaulted and crashed into the river Wäerne. His place was taken by a veteran of the Spanish Civil War, *Major* Werner Zober.

On 25 April *Oberst* Hogeback was ordered by Peltz to use all his jets to attack Soviet troop columns approaching Berlin from the south. At the same time, I./KG 51 handed over its remaining nine Me 262s to JV 44, although the previous day the latter unit had requested that it be sent no more aircraft since it did not have the facilities to handle them! The *Stab* and II./KG(J) 54 were disbanded with their remaining personnel transferring to ground fighting with the 368. *Volks grenadier-Division*.

Twelve Me 262s from JV 44 were involved in an air battle with 40 B-26s in the Neuburg area. One of JV 44's aircraft was the Me 262 A-1a/U4 fitted with a 50 mm MK 214 A cannon and probably flown by *Major* Wilhelm Herget, a night fighter *Experte*. Five enemy aircraft were shot down for the loss of two Me 262s, one to a technical fault, the other to fighters. JG 7 flew what was probably its last operation against American four-engined bombers. Five pilots claimed victories against the B-17s: *Major* Späte (two) and *Uffz.* Schöppler, *Ofw.* Göbel, *Lt.* Kelb and *Uffz.* Engler one each. One of 9./JG 7's pilots, *Fhr.* Hans-Guido Mütke, was forced to land his Me 262 at Zürich-Dubendorf in Switzerland due to lack of fuel. He was interned. *Lt.* Sepp Huber of III./KG(J) 6 crashed on take-off from Prag-Rusin and he was killed.

Thirty-one aircraft from III./KG(J) 6 and JG 7 flew a combined operation on 26 April against Russian supply columns in the Cottbus-Bautzen area. They destroyed two aircraft on the ground and six motor vehicles with their R4M rockets. Twelve Me 262s from JV 44 intercepted B-26s which had been briefed to bomb Lechfeld. The attack was led by Galland who opened fire with his R4Ms, blasting one of the bombers from the sky. His wingman, *Uffz.* Schallmoser, shot down a P-47. In total JV 44 claimed five B-26s and a P-47 for the loss of two Me 262s. Galland received a bad leg injury but still managed to land his



BELOW: During late April, *Obstlt.* Hermann Hogeback (right) took over command of the remaining Me 262 units based in the Prag area including most of JG 7, I./KG(J) 54 and III./KG(J) 6. On the 25th of the month, his *Gefechtsverband* was ordered by Generalmajor Dietrich Peltz (left) to concentrate on attacking all Soviet troops approaching Berlin from the south. In the background of this photograph is the badge of KG 6, which Hogeback had previously commanded.



Me 262 at München-Riem despite a strafing attack by P-47s. His place was taken, next day, by *Obstlt.* Heinz Bär, whose own III./EJG 2 had been disbanded.

After two loads of fuel arrived at Prag, *Gefechtsverband Hogeback* was able to fly ground-attack sorties against Soviet supply columns in the Cottbus area during the evening of 27 April. A total of 65 vehicles and six Soviet Il-2s were destroyed for the loss of two Me 262s including that piloted by the *Staffelkapitän* of 7./KG(J) 6 *Oblt.* Henning Gulde. During an American attack on München-Riem, Me 262s of JV 44 shot down five P-47s. The successful pilots included *Obstlt.* Bär (two), *Lt.* Franz Köster (two) and *Major* Wilhelm Herget (one).

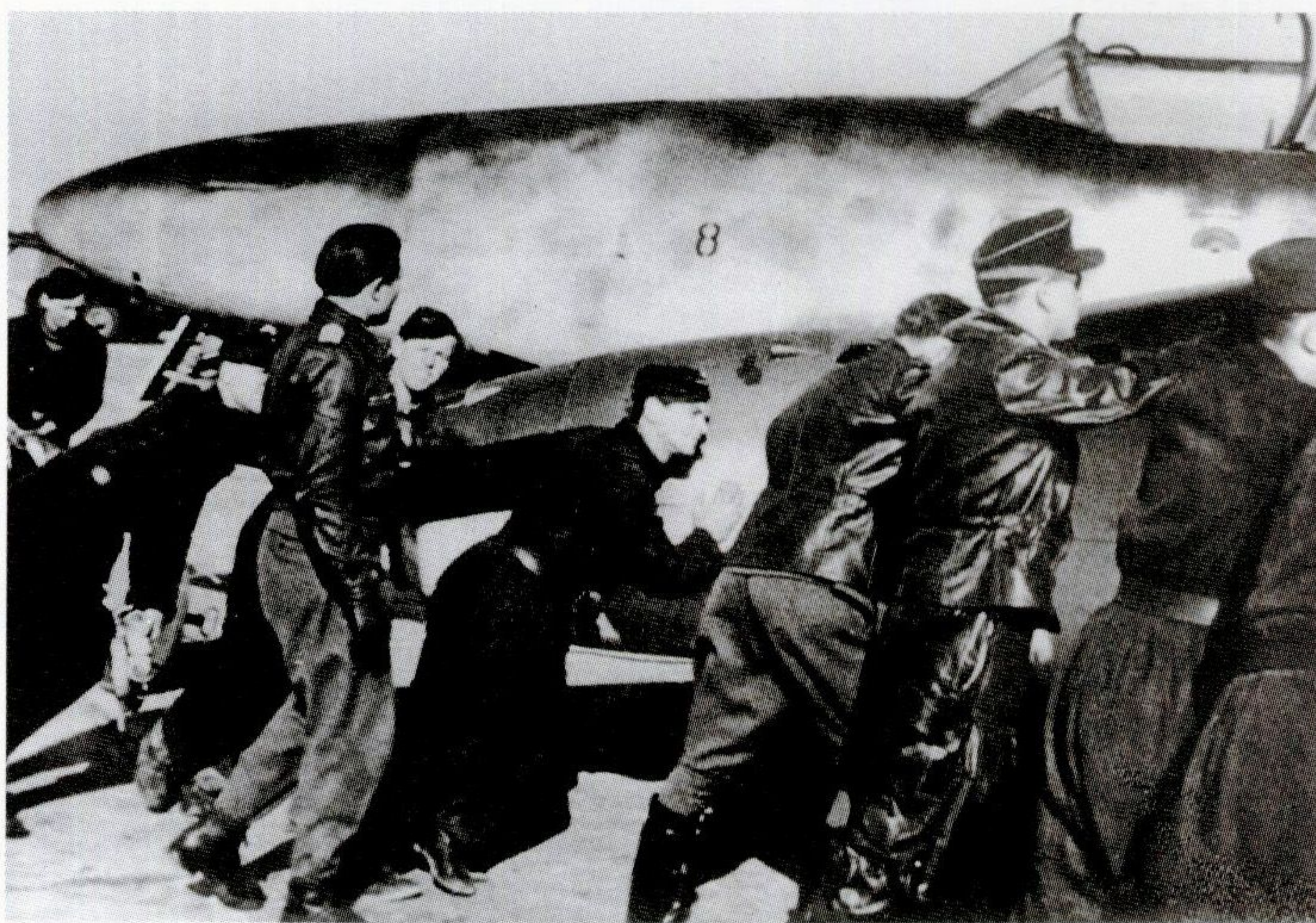
On 29 April, 18 Me 262s from *Gefechtsverband Hogeback* attacked enemy forces on the roads between Bautzen and Weisswasser, but four pilots from the virtually defunct II./KG(J) 54 were shot down. These included *Hptm.* Helmut Kornagel, *Staffelkapitän* of 6./KG(J) 54, injured at Prag-Rusin and *Hptm.* Hubert Spadiut, *Kapitän* of 5./KG(J) 54, who baled out safely. During the evening JV 44 transferred 21 aircraft from Riem to Salzburg and Innsbruck in the face of advancing American armour. At the same time, other aircraft from the unit together with ground echelons from I./KG(J) 54 were ordered to transfer to Bad Aibling or Innsbruck. JV 44 then retained a strength of 25 aircraft at Riem.

Next day, nine Me 262 bombers from I./KG 51 joined the *Gefechtsverband* at Prag-Rusin. An aircraft of I./KG(J) 54 was shot down by Soviet flak, but a pilot from the same unit destroyed an Il-2. Two other Il-2s fell to *Ofhr.* Wittbold and a Yak-9 to *Oblt.* Schlüter of JG 7 during the last days of April. By early May, the fuel situation in the Prag area had worsened further and on the 2nd, 22 Me 262s from JV 44 were flown to Innsbruck but seven crashed, perhaps deliberately, on landing. On Bär's orders the engine regulators were then removed and taken to a remote Alpine village and thrown into a lake. Next day, JV 44's remaining Me 262s were destroyed by their ground crews just as American tanks arrived at Salzburg-Maxglan airfield. By this time, JV 44 had been officially redesignated IV./JG 7. This order seems to have had its origins in the animosity which existed between Galland and the new *General der Jagdflieger*, *Oberst* Gordon Gollob, who attempted to undermine the former's influence. III./KG(J) 54 was officially disbanded, and the remaining elements of JG 7 in Bavaria surrendered to the Americans.

On 4 May, JG 1, claimed the first He 162 victory when *Lt.* Rudolf Schmitt from the 1. *Staffel* shot down a Typhoon. Three days earlier I. and II./JG 1 had been merged and re-organised with an operational *Gruppe* known as I.(*Einsatz*)/JG 1 and a training *Gruppe* designated II.(*Sammel*)/JG 1. No further operations were flown by the unit before Leck was captured by British troops on 6 May. Most of the unit's He 162s were found lined up in neat rows on the airfield.

A day earlier an uprising had begun in Prag. Hogeback's jets were immediately ordered to fly missions within the city limits to support *Waffen-SS* units fighting the Czechs. A combat unit was created at Prag-Rusin to help the personnel of the enemy-encircled airfield at Kletzan. Soon afterwards the renegade Russian *General* Bunjatschenko, heading Wlassow's 1st Division of the ROA, demanded that *Gefechtsverband Hogeback* hand over its entire motor pool. This demand was refused and Bunjatschenko's forces subsequently made an assault on Prag-Rusin with armour and artillery. III./KG(J) 6 then took off to defend the airfield, attacking the ROA armour and machine gun posts.

Attacks against Wlassow's troops continued during the next two days, the ROA forces coming within 300 metres (1,000 ft) of the airfield perimeter and pouring fire at the airport buildings and hangars. The airfield would have been taken if the Germans had not positioned two 12.5 cm flak batteries between the city and the airfield. During the late afternoon of 7 May the last jets took off from Rusin to attack Soviet troops. With all their ammunition expended, they landed at Saaz where all non-operational aircraft were blown up. Next day, the jets that remained took off from Saaz to attack Soviet armour, perhaps the last jet sortie of the war being flown by the *Kapitän* of 2./JG 7, *Oblt.* Fritz Stehle, who shot down a Soviet Yak-9. With the news of the German surrender at midnight, most of the jets that remained were set on fire or blown up.



ABOVE: Pilots and ground crew manhandle an Me 262 A of JV 44 to its dispersal. The aircraft carries a very small black number '8' on the forward fuselage.

“Some fighter had tried to get me again but was too late...”

Herbert Schlüter, Stab/JG 7

“It was the second half of April and the situation was hopeless on all fronts. Morale was correspondingly low. Those of us who had come from *Kommando Stamp* were incorporated into the *Stabsstaffel* of JG 7 and hardly had contact with the others. I knew no one, other than *Oblt.* Stratman who had been a flying instructor with me.

“I only flew very few missions but I never discovered the reason. I assume it was the lack of fuel and spare parts because we had more pilots than aircraft. I flew three sorties on the Eastern Front. The orders were to attack Russian troops on the ground. Our aircraft were armed with two 30 mm MK 108 cannon. Once a 250 kg bomb was slung beneath the aircraft. I always flew alone. I did not see much action either because there were no enemy troops in the target area or I could rarely distinguish between friendly and enemy troops.

“On one these flights, I was returning to Prag-Rusin when I encountered a Soviet fighter-bomber formation flying on a south-westerly heading at an altitude of between 1,800 and 2,000 metres (5,900 and 6,500 ft). There was a large number of IL-2s in rows of eight to ten with more flying on a parallel course behind them. Numerous escort fighters were positioned above and below. I attacked the formation but fighters appeared and turned to resist my attack. I could not chance a dogfight. I turned and escaped in an easterly direction only to turn again and renew my attack. Again the fighters saw me too soon and I had to break off. It was clear to me that only the element of surprise would allow me to be successful. After flying in an easterly direction, I turned and flew at an altitude of 180-200 metres (590-656 ft) on a south-westerly heading. As soon as I saw the formation above, I pulled up on full power and found a number of fighters in front of me. I was very close when they turned into my attack. Now with reduced speed I was able to pull tighter turns. A burst of fire and one of the fighters broke up in flames. I was almost hit by the debris. Now I was in the middle of the formation and since I could not risk a dogfight, I had to break away again. When the Me 262 lost airspeed it accelerated slower than a conventional aircraft. I therefore decided to play a trick familiar to all fighter pilots when it was imperative to stick to an opponent who was trying to evade by out-turning his pursuer. Deflection shooting. That meant not to aim straight at the target but to direct my fire at an imaginary point where the aircraft is going to be. I was now the pursued and had to counter their attempt to hit me with deflection shooting. I dropped my left wing in order to fake a turn, held the rudder over and flew straight at a declining angle of 12 to 15 degrees on full power. As I did so, salvos of large calibre bright red tracer streamed by to my left. The Russians had learned their lessons well. Despite this serious situation, I could not avoid a little laugh. My fuel was too low for another attack. We needed a fuel reserve because of the Mustangs whose practice it was to wait for us at Prag-Rusin. My kill was a probable because I did not have a witness and did not observe the wreckage hit the ground.

“On most days we had to wait for mission orders. They never came. I did fly a mission under the leadership of *Major* Späte. We flew five aircraft against a bomber formation that had attacked Dresden or Leipzig. My aircraft was armed with two 30mm cannon and 24 R4M rockets. Shortly before we took off, someone ran up frantically waving and climbed on to my wing. I opened the canopy and he told me that I had a new version of the R4M rocket and that it could be fired from a distance of 1,000 metres (3,280 ft). Soon we had sight of a formation of B-17s on a north-westerly heading. We climbed above them and attacked from behind at a dive angle of three to five degrees and at high speed. At a distance of 900 meters (3,000 ft), I had a pair of bombers in my sight and pushed the button to fire a salvo of rockets. None of them fired. My first thought was corrosion under the button and I squeezed it harder. Nothing happened. What I did not know at the time was that my aircraft had sustained many hits from defensive fire.

“Now I decided to close in at greater speed and pulled the throttle to idle. Unlike piston-driven aircraft where the propeller acts as a brake and we could adjust our speed to that of the target, the Me 262 flew on without a noticeable reduction in speed. At a distance of about 200 metres (656 ft) I fired the first burst with my cannon. The rear of the bomber, especially around the stabilizer was hit. Then I fired another burst into the left wing between the number one engine and the fuselage. Both engines were hit and the wing between the number one engine and the fuselage was ripped open. The wing was on fire. Many parts came off and sailed through the air. I kept firing and flew under the bomber at a distance of 10-20 metres (30-60 ft).

“A few seconds later I felt my aircraft shudder as the left wing dipped and at the same time the nose went down. After firing, I had immediately gone back to full power, but now I throttled back to idle and tried to continue to fly horizontally. I could not move the control column. With all my strength I tried again. Impossible! The control column would not budge. The angle of the wing increased and the airspeed reached frightening proportions. I had not looked at the airspeed indicator even when I had approached the bombers. I knew from past experience that with a dive angle of five to seven degrees, a speed of 940-960 km/h (584-596 mph) is reached very quickly and I was flying much faster now.

“Many thoughts flashed through my head. I remembered from conversion training the insistent warnings not to approach 1,000 km/h (620 mph). I had always followed that dictum. I also thought about the experience of a fellow pilot who had reached or had gone beyond the 1,000 km/h limit. When he had finally regained control he had torn the fuel tank from its fastenings and put a huge dent in the bottom of the fuselage. Fortunately, at this point the centrifugal forces ceased to be a problem. I was aware of the situation that I found myself in and that I could not afford to make a mistake. The Me 262 had an electric aileron trim system. Very quickly I tapped the trim toggle switch and to my great relief the left wing lifted a little. I repeated this several times and the wing lifted completely. Now I had to do the same thing to the elevator trim. This also worked. I was flying normally again. A little later I set the trim to make the aircraft a little tail-heavy and the nose shot up rapidly. When the airspeed reached 860 km/h (535 mph) I grabbed the control column and the aircraft was again under full control.



ABOVE: Lt. Herbert Schlüter served as a fighter pilot with I./JG 300 before joining Kommando Stamp.

“A few minutes later I observed a group of Mustangs, about 50-60 of them, 500 metres (1,640 ft) below me and flying in my direction. I attacked immediately in a 12-15 degree dive. The Americans had obviously seen me because they discarded their drop tanks and dived away. My airspeed increased rapidly and I had the same problems as before and was forced to break off the attack.

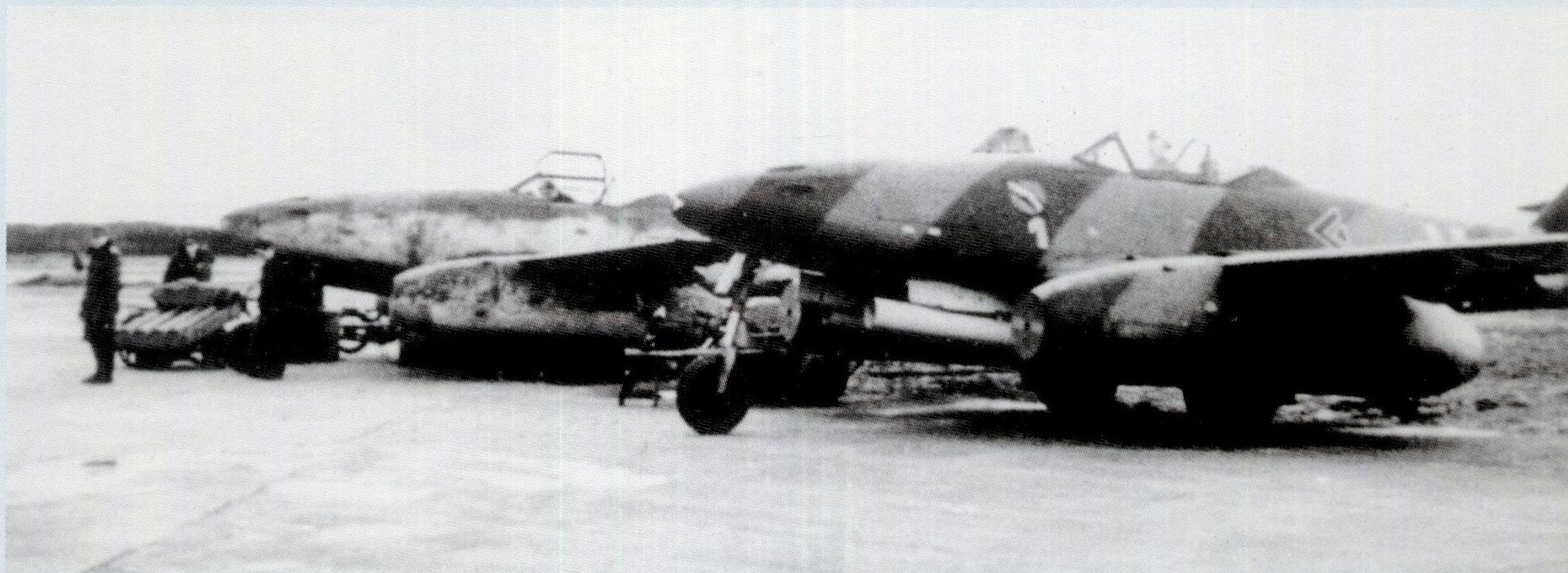
“I returned to Prag-Rusin. Take-offs and landings there were very difficult because Mustangs were frequently in the vicinity of the airfield. The period after take-off until full speed was reached and the time before landing when airspeed had to be reduced made the Me 262 very vulnerable to attacks by piston-engined fighters. For this reason I had developed a landing technique to cut the risk of being shot down. I approached a little village with a pointed church spire that was located about 40 km (25 miles) from the airfield. From there I flew at an altitude of between 30-50 metres (100-160 ft) with a compass heading to the runway. Shortly before I reached the field, I had memorised a spot where I switched the turbines to idle and as soon as speed reduced to 400 km/h (250 mph), I activated the landing flap switch. The landing flaps did not activate however because of the overload override and I was able to lower the landing gear with the emergency switch. The landing gear was lowered in split seconds by compressed air. The aircraft wanted to rear up so that I had to use the control column to keep it on the ground, completing a very fast landing. Now the landing flaps deployed and behind me I could hear the barking of the flak. Some fighter had tried to get me again but was too late.

“After the landing I saw the reasons for my problems. The right wing was peppered with 10-12 bullet holes. The fuel cells of the rockets had burned but the projectiles were intact. My aircraft must have been hit before I had attempted to fire the rockets. The cowling of the right turbine also had bullet holes. The jet engine itself had not been damaged. Parts of the cowling had been torn off though when I increased my airspeed to dive away from the bombers. This would explain the shudder I felt and the ensuing aerodynamic imbalance had thrown the Me 262 into the virtually uncontrollable dive to the left.

“I made my report and mentioned my probable kill, but since I had no witnesses and could not report what had happened afterwards, it was not accepted. In my own mind I have no doubts that the heavily damaged bomber could not have stayed airborne very long after my attack. Then I remembered that my Me 262 was equipped with a gun camera and the combat must have been filmed. However, when I returned to my aircraft 30 minutes later to collect the film, I found that both it and camera had been stolen.

“Our *Staffel* transferred to Saaz. I did not make any flights from there. The transfer flight to Saaz was my last in the Me 262. On 8 May the shooting stopped and we headed west in our lorries to surrender to the Americans next day.”

RIGHT: In February 1945, Kommando Stamp was disbanded and its aircraft and personnel absorbed by the Stabsstaffel of JG 7. Its role then changed from air-to-air bombing of Allied aircraft to attacking them with the WGr 21 air-to-air mortar, two launching tubes for the weapon being mounted below the forward fuselage of the Me 262.



Messerschmitt Me 262 A-1a (W.Nr. unknown) of Stabsstaffel/JG 7 at Rechlin, February 1945

Many Me 262s of JG 7's Stabsstaffel had rather unusual camouflage schemes such as that seen here. It comprised regular diagonal stripes of brownish green and mid-green (RLM 81 and 82) on the upper surfaces, fading to similarly coloured mottling on the fin and rudder. This machine, possibly that allocated to the unit commander, Major Gerhard Stamp, had the double chevron of a Kommandeur painted in black outlined in white, plus the green number '1' painted below the unit badge on the nose.

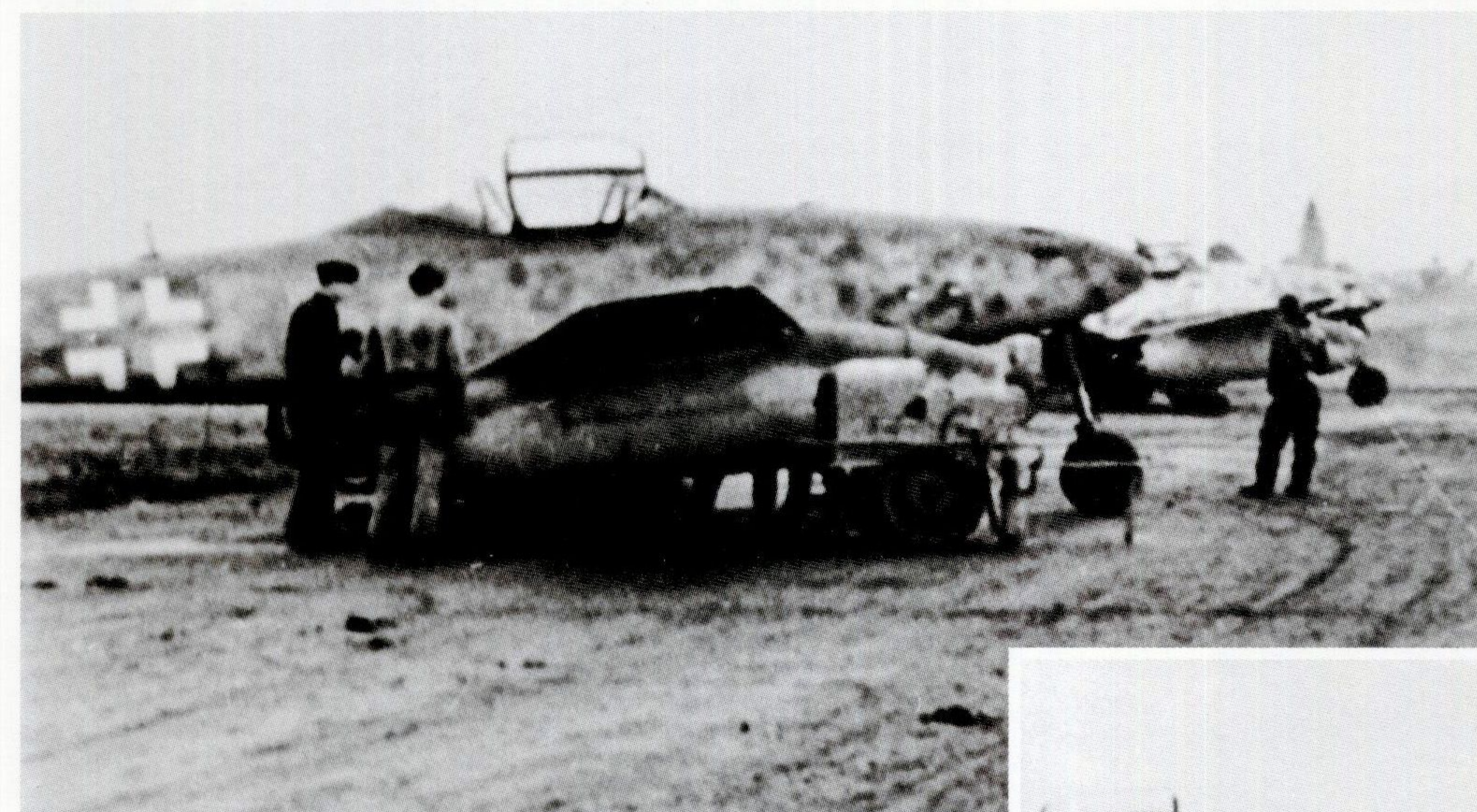


RIGHT: The pilot standing by the nose of the Me 262 A-1a in the foreground of this photograph is Oblt. Heinz Rall, Staffelkapitän of 8./KG(J) 54. His somewhat battered aircraft has an unusual camouflage pattern in faded greens.



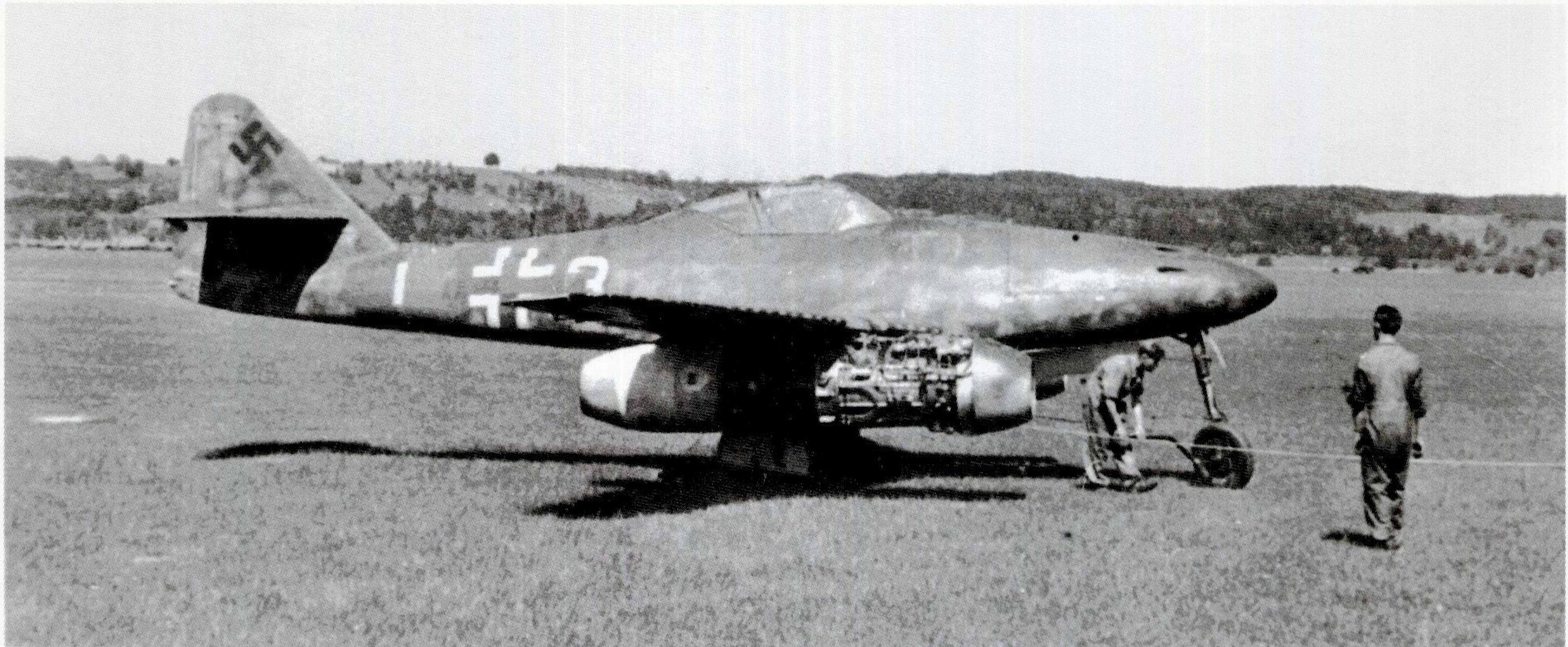
Messerschmitt Me 262 A-1a (W.Nr. unknown) of 8./KG(J) 54 at Neuburg am Donau, Spring 1945

This aircraft appears to have been painted with medium green (82) on all upper surfaces oversprayed with large patches of brownish green (81). No individual markings have yet been applied and the swastika also appears to have been omitted.



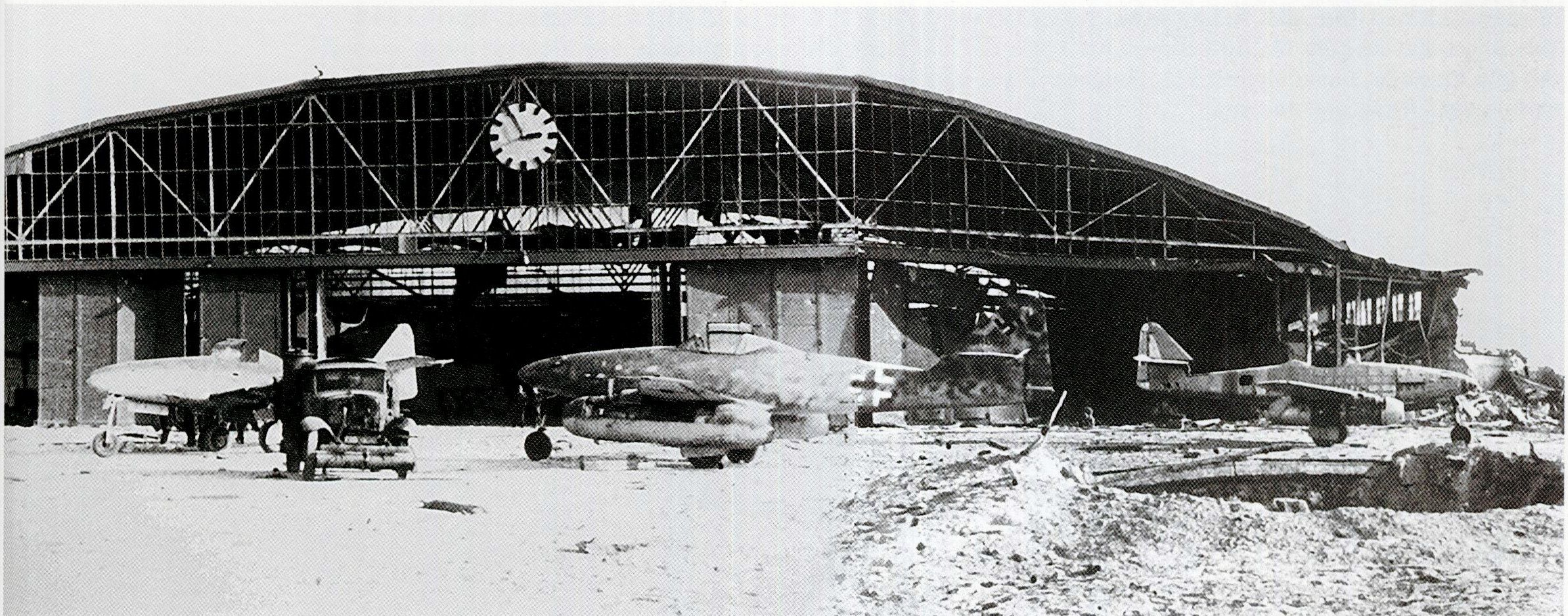
ABOVE AND RIGHT: This Me 262 A-1a may have been flown by Oblt. Heinz Rall, Staffelkapitän of 8./KG(J) 54 who can be seen standing in front of the jet's nose in both photographs. The machine appears not to carry any unit code but was heavily mottled around the nose and fuselage sides.

RIGHT: At 08:46 hrs on 25 April 1945, this Me 262 A-1a force landed at Zürich-Dubendorf in Switzerland owing to lack of fuel. Its markings are typical of those carried by 9./JG 7 with a white number '3' forward of the fuselage cross and a white vertical bar aft, this superimposed on the blue and red unit identification bands each of which was 450 mm wide. This aircraft is currently on display at the Deutsches Museum in München.



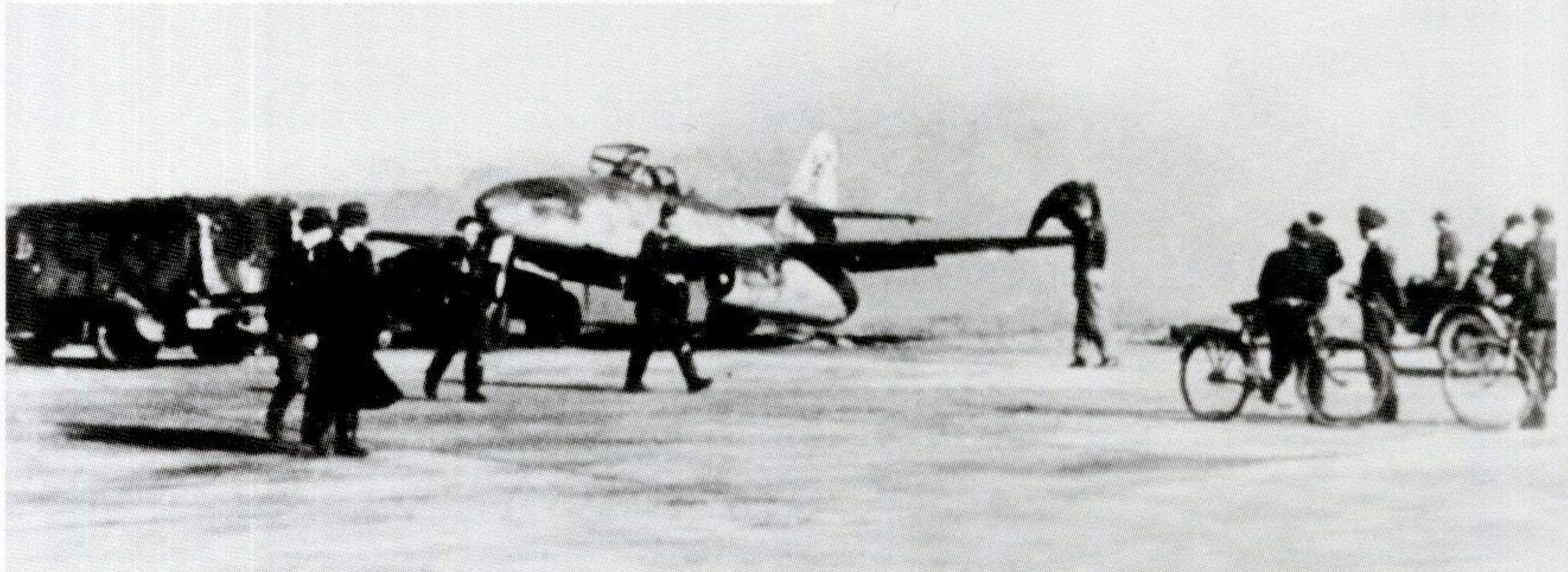
LEFT: This Me 262 A-1a was captured by troops of the British 15/19th King's Royal Hussars as they advanced into northern Germany. The aircraft has a large red number '3' outlined in white painted on the forward fuselage and may have belonged to III./JG 2.

BELOW: Three Me 262s of I./KG(J) 54 photographed at Zerbst following a USAAF bombing raid on the airfield on 10 April 1945. The aircraft on the left and centre have conventional camouflage while that to the right remains unpainted.



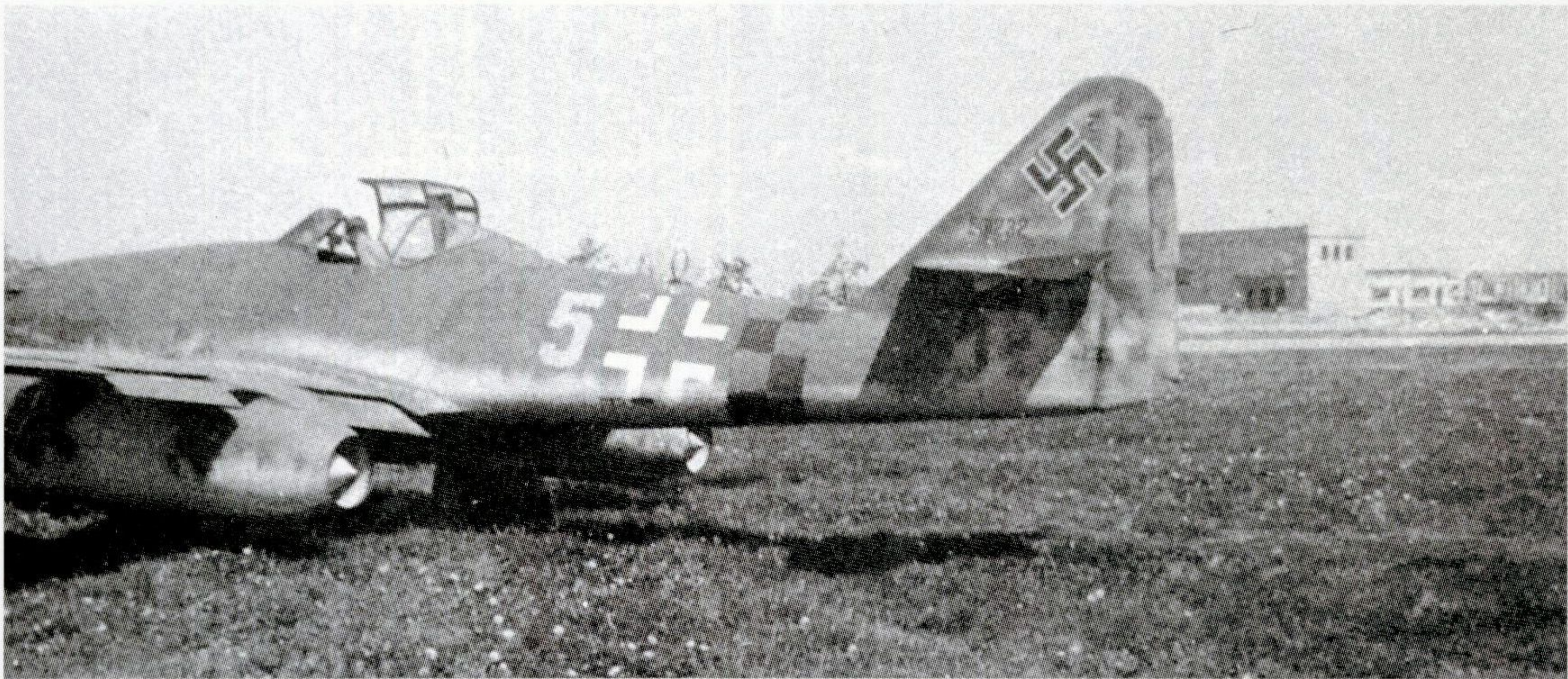


ABOVE: A member of JV 44's ground crew assists a pilot from the unit about to set out on a training mission in March 1945. The Me 262 A-1a (W.Nr. 110556) carries a large red letter 'S' on either side of the fuselage forward of the cross which is repeated on the nosewheel door. It also has the legend 'A4' painted in red on various parts of the airframe which probably indicated structural weaknesses apparent on this training aeroplane.



BELOW: Luftwaffe mechanics – the so-called 'Black Men', on account of their black overalls – prepare JV 44's Me 262s at Brandenburg prior to the unit's transfer to its operational base of München-Riem at the end of March 1945.

RIGHT: This aircraft 'Yellow 5' of 9./KG(J) 6, was captured by American troops at München-Riem at the end of the war. The commander of the Staffel was Hptm. Günter Overdieks.



Messerschmitt Me 262 A-1a (W.Nr. 501232) of 9./KG(J) 6 at Neuburg am Donau, April 1945
This Obertraubling built Me 262 carried KG(J) 6's red and black chequerboard unit identification bands around the rear fuselage. Some aircraft are thought to have carried the badge of III./KG(J) 6 which comprised three silver swans flying over the sea.

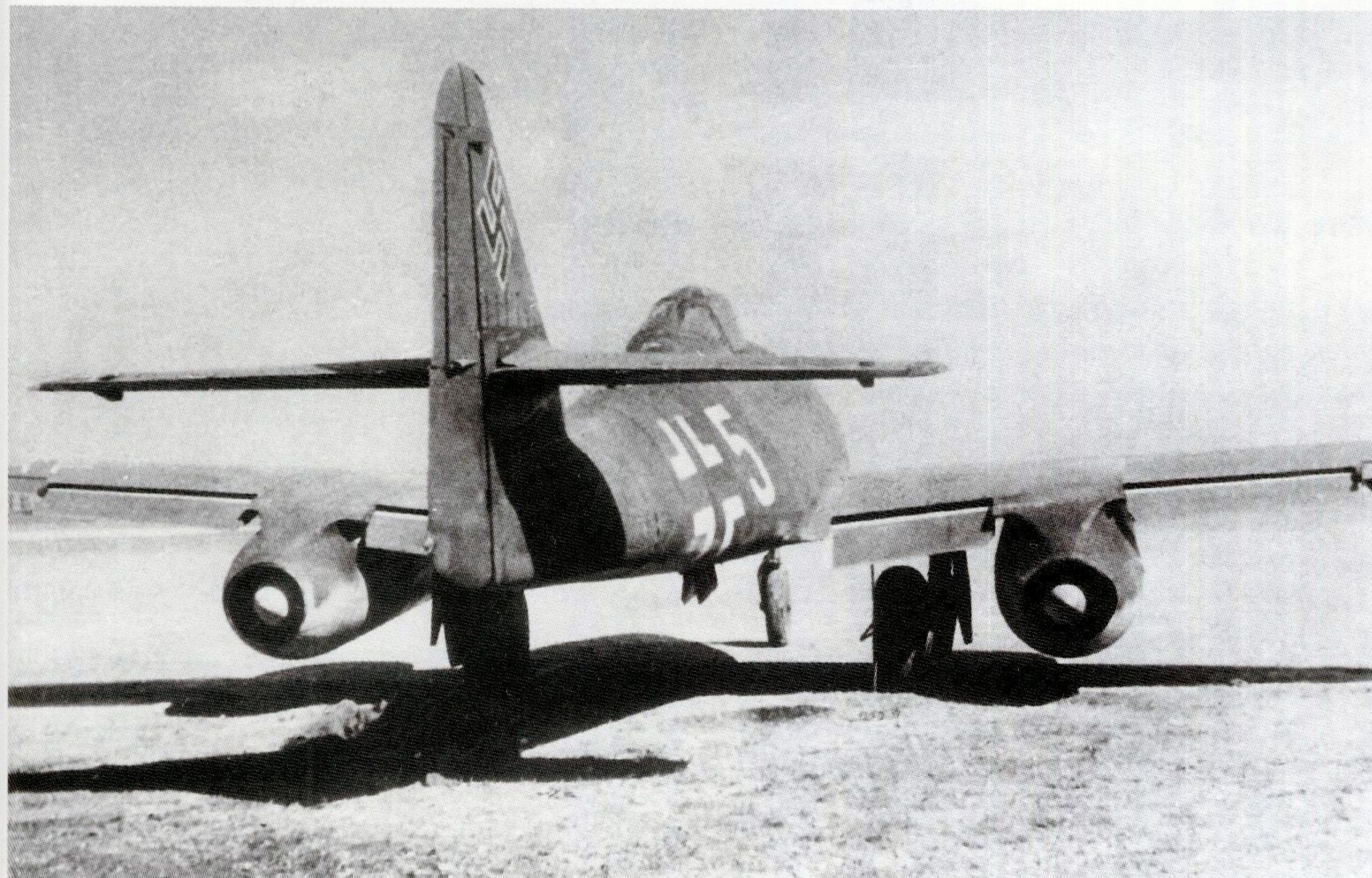


1944-1945

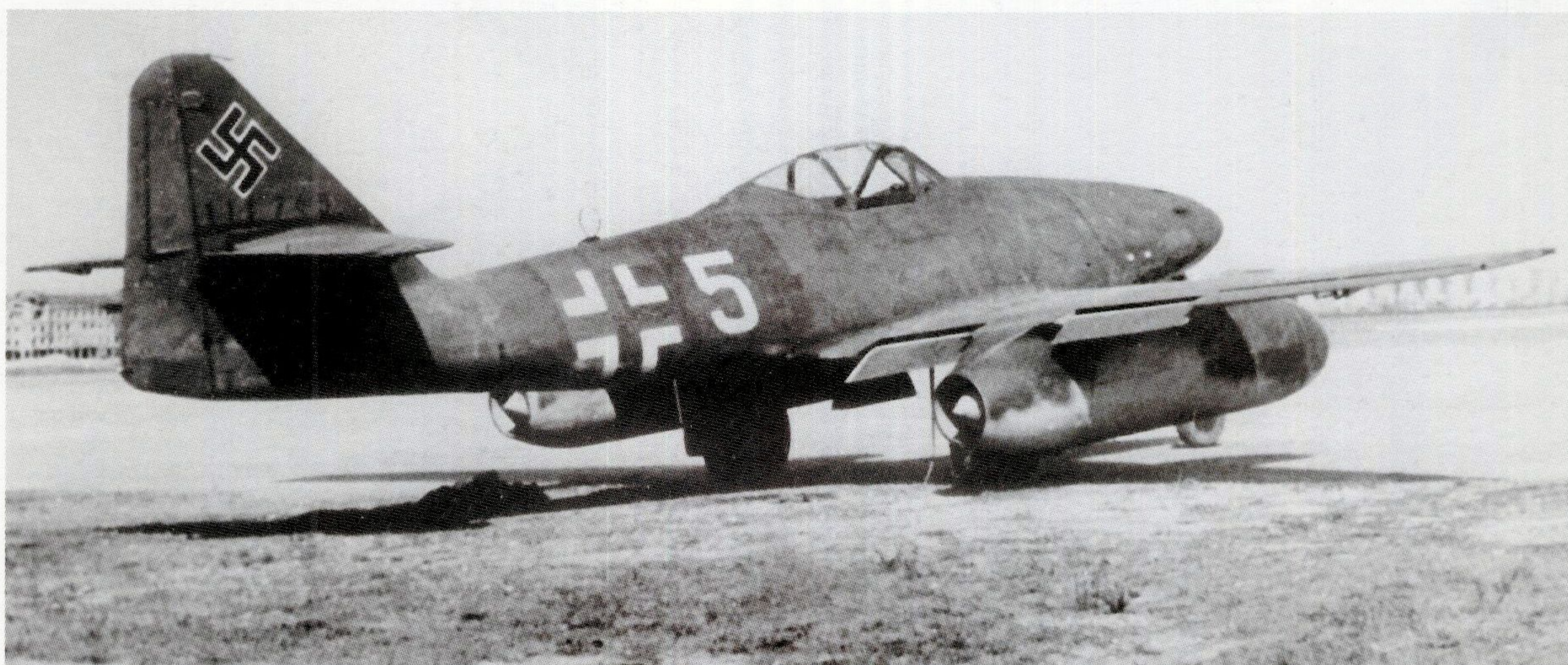
RIGHT: Uffz. Eduard Schallmoser was flying 'White 5' the Me 262 A-1a (W.Nr. 111745) in the foreground of this photograph on 4 April 1945 when he rammed a P-38L flown by 2nd Lt. William Randle of the 49th FS, 14 FG. Although the aircraft was damaged, he was able to land safely. Schallmoser may be seen on the right together with another pilot of JV 44.



LEFT: Another view of Me 262 A-1a 'White 5' of JV 44 which, after repair following the damage incurred on 4 April, was flown in combat again on 9 and 10 April by Uffz Johann Karl Müller. On the second of these operations Müller shot down a P-47.



BELOW: This Me 262 was often piloted by Fw. Eduard Schallmoser while he was serving with JV 44. Schallmoser was born on 4 October 1923 at Ayling near München and joined the Luftwaffe in 1941. An extremely competent pilot, he was assigned to the Fluglehrschule Quedlinburg as an instructor, later serving successively with 6./JG 101, 7./JG 112 and 12./EJG 1. He began training on the Me 262 with 10./EJG 2 at Unterschlauesbach before being transferred to JV 44 in March 1945. He twice inadvertently rammed enemy aircraft, but both times succeeded in baling out. After the end of the war he moved to Argentina and died at Oberá in October 1991.





ABOVE: A number of Fw 190 D-9s and D-11s were delivered to the so-called 'Papegai Staffel' or 'Würger Staffel' of JV 44. This aircraft, 'Red 1' (W.Nr. 600424) had a red and white quartered badge painted beneath the cockpit outlined in a black circle with the motto (in Bavarian dialect) 'Verkauft's mei Gwand I'fvahr in Himmel!' ('Sell my clothes, I'm going to heaven!') in white.



ABOVE: Another of JV 44's airfield protection Fw 190 D-9s was coded 'Red 13'. This aircraft's motto, painted in white on the port side of the fuselage, reads: 'Rein muß er und wenn wir beide weinen!' ('In it goes even if it brings tears to our eyes!').



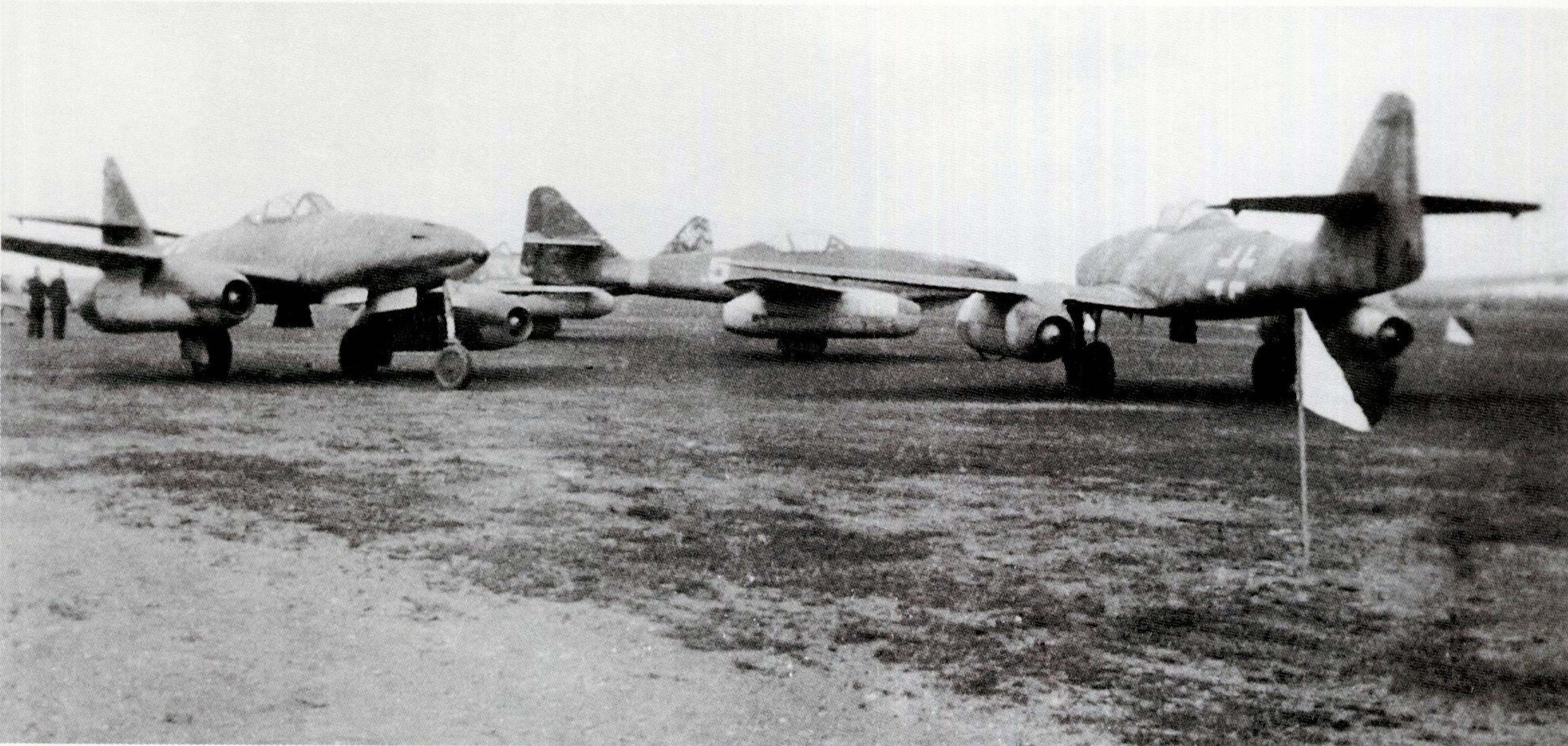
RIGHT: Four pilots from the 'Papegai/Würger Staffel' of JV 44 pose in front of one of their Fw 190 D-9s which has red undersurfaces with chordwise white stripes to enable easy identification by their own anti-aircraft gunners. From left to right are: Lt. Karl-Heinz Hoffmann, Hptm. Klaus Faber, Lt. Heinz Sachsenberg and Hptm. Waldemar Wübke. It is thought that the photograph was taken on 1 May 1945, possibly at Ainring airfield.

Focke-Wulf Fw 190 D-9 (W.Nr. 400240) of the Sachsenberg Staffel of Jagdverband 44 at München-Riem, April 1945

The uppersurfaces of the Staffel's Fw 190s were finished in a segmented pattern of medium grey (RLM 75) and medium green (RLM 82) with the top of the fuselage having some brownish green (RLM 81) patches. The pale blue (RLM 76) undersurfaces were overpainted bright red with white chordwise stripes to enable easy identification.



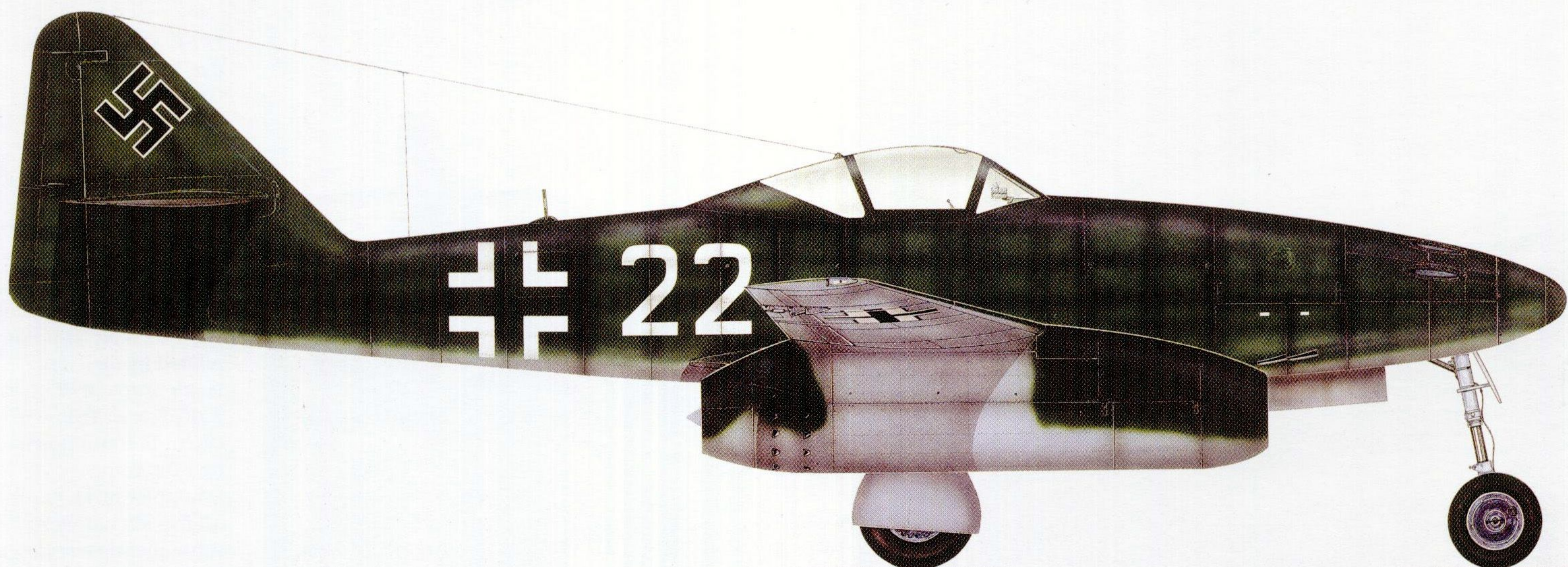
LEFT: On 8 May 1945, five Me 262s from Gefechtsverband Hogeback surrendered to British troops at Fassberg in Germany. These included 'Black X' (W.Nr. 500200) flown by Fj.Ofw. Hans Fröhlich of 2./KG 51 (to the left), 'White 5' of 2./JG 7 (W.Nr. 111690) piloted by Oblt. Fritz Stehle, Kapitän of 2./JG 7, and 'Yellow 5' (W.Nr. 111007) flown by Uffz. Anton Schöppler of 11./JG 7. All five aircraft were subsequently test flown by British pilots.



RIGHT: The night-fighter pilot, Major Wilhelm Herget, flew at least one sortie with the Me 262 A-1a/U4 (W.Nr. 111899) armed with a 50 mm MK 214 cannon. On 25 April 1945, he encountered the B-26s of the US 323rd Bomb Group some crews from which described the weapon as looking like '...a giant telephone pole'.



LEFT: This Me 262 A-1a, B3+GR (W.Nr. 111620), is known to have been flown by Lt. Günther Neilhardt of 7./KG(J) 54 on 2 February 1945, and Ofw. Friedrich Gentsch of I./KG(J) 54 six days later. Three training flights were also made with the aircraft on 8 February by Neilhardt at Neuburg, but the aircraft was destroyed in an air raid on 23 February. The individual aircraft letter 'G' was painted white with the remaining part of the code in black.

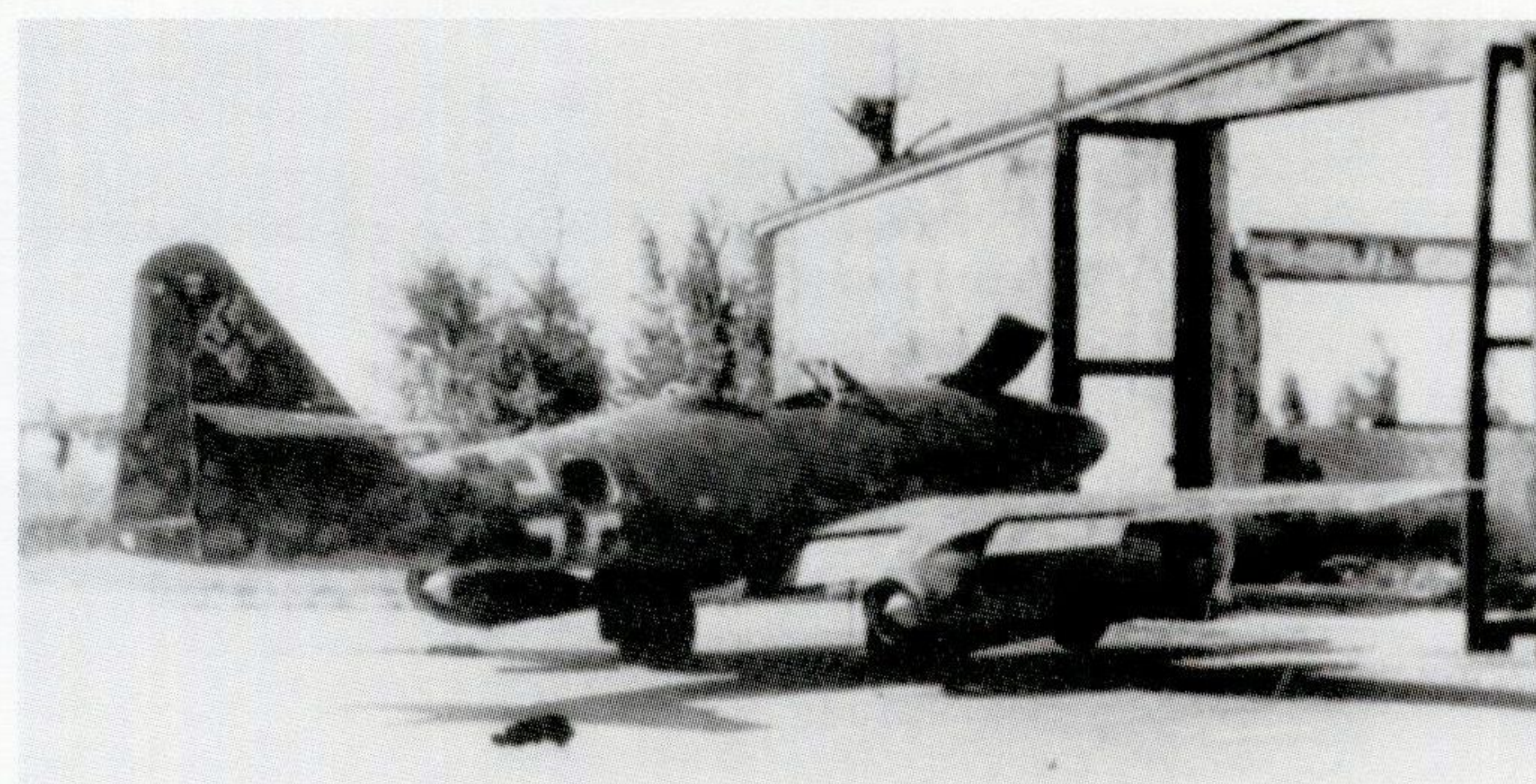


Messerschmitt Me 262 A-1a (W.Nr. unknown) of Jagdverband 44 at München-Riem and Salzburg-Maxglan, April 1945

Most Me 262s flown by JV 44 had plain dark green uppersurfaces with simple white numbers painted forward of the fuselage Balkenkreuz. The undersurfaces were in pale blue (RLM 76).



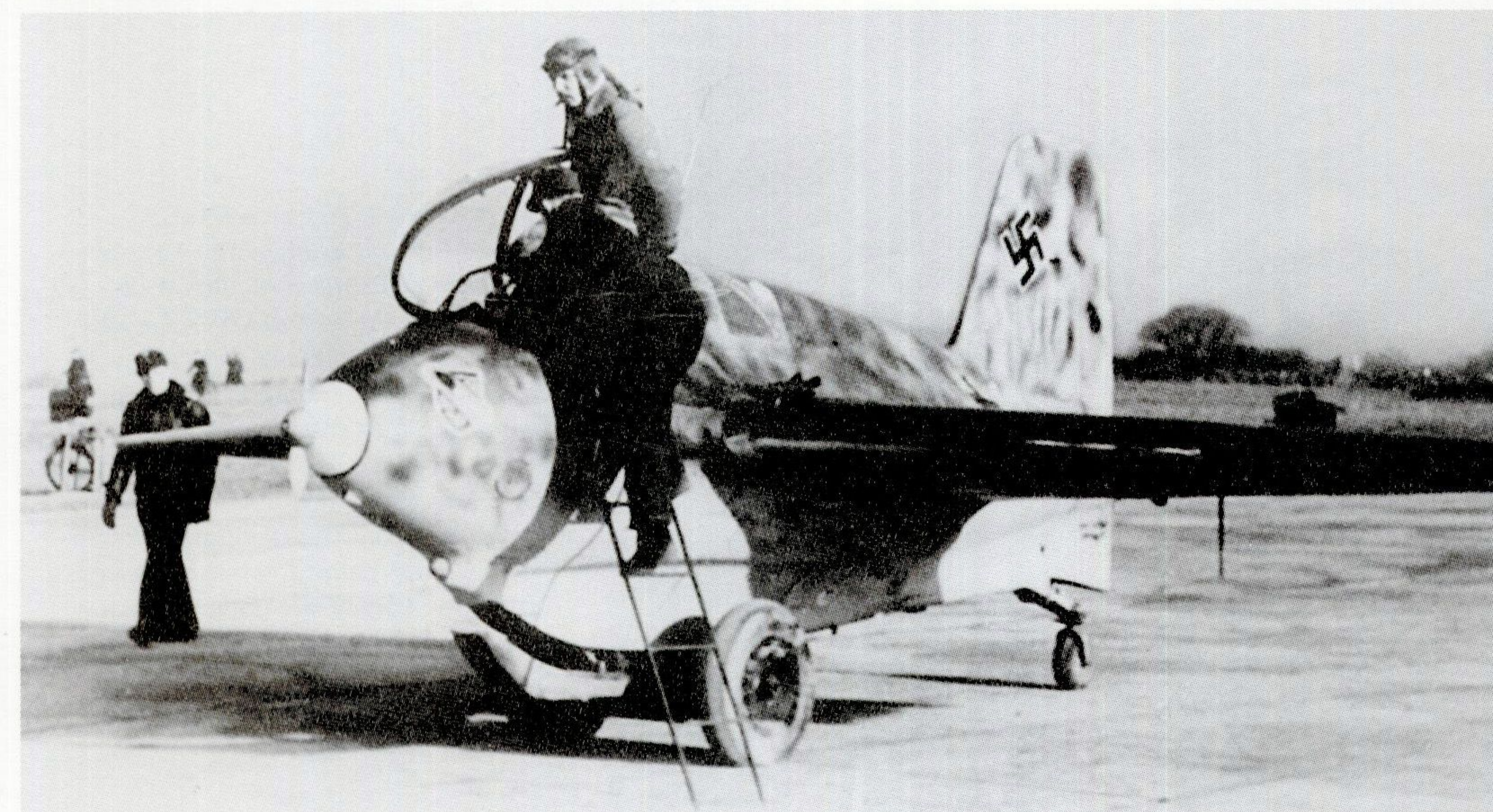
LEFT: This Me 262 of JV 44 ran off the runway in Salzburg-Maxglan in Austria on the morning of 29 April 1945 and was found in this condition by American troops.



ABOVE: Relatively few photographs exist of Me 262s of III./KG(J) 6. This shows one of the unit's aircraft at Herzogenaurach in April 1945 with its red and black chequered rear fuselage band.



1./JG 400 emblem.

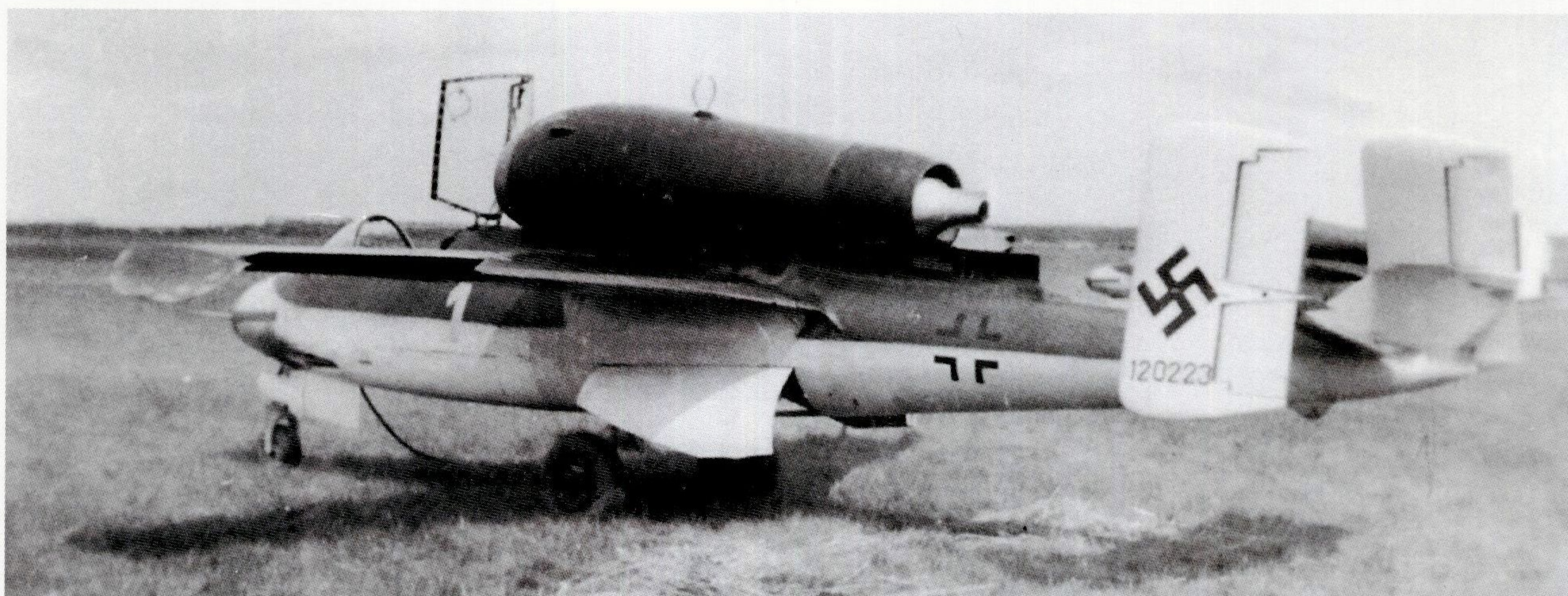


LEFT: Ofw. Wilhem Josef 'Jupp' Mühlstroh of 1./JG 400 is assisted into the cockpit of his Me 163 B. The aircraft carries the badge of the Staffel, a rocket-propelled flea with the motto 'Wie ein Floh - Aber Oh!' ('Like a flea - but Oh!').



LEFT: The tiny size of the new He 162 A-2 jet fighter of I./JG 1 photographed at Ludwigslust in April 1945 is shown to advantage in this picture. The aircraft has black, white and red bands around the nose with red arrows behind. The significance of the latter markings remains a mystery.

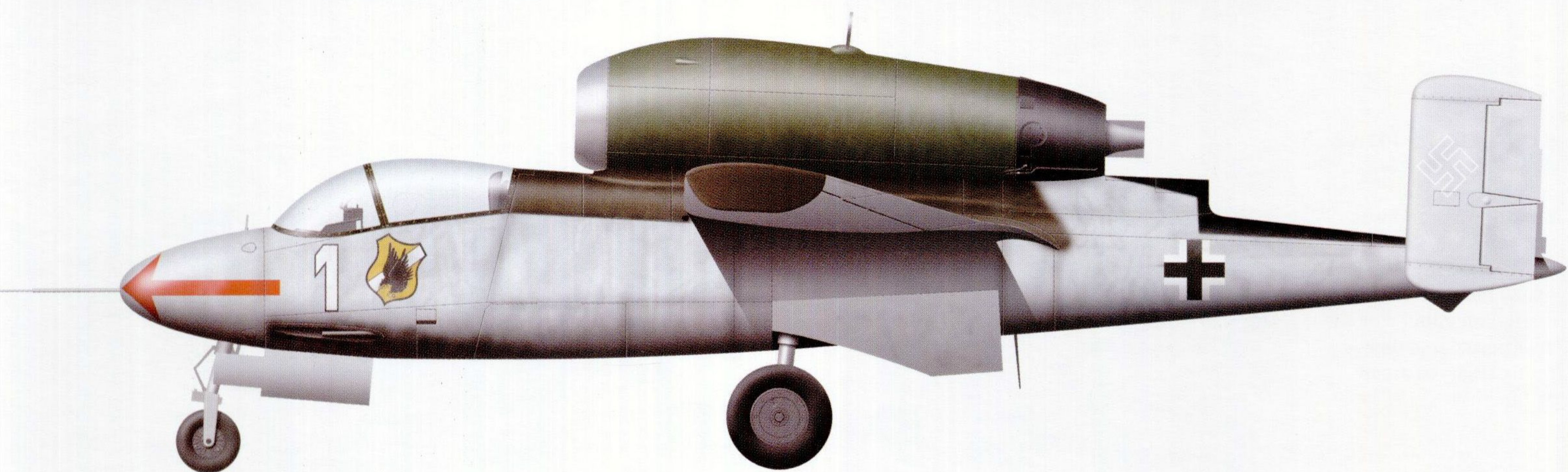
RIGHT: This He 162 A-2 (W.Nr. 120223) was built at Heinkel's Rostock plant and was transferred to 3./JG 1 at Ludwigslust. It has the yellow number '1' painted on either side of the fuselage together with a large red arrow on the nose.



LEFT: Lt. Gerhard Stiemer of 3./JG 1 flew an He 162 A-2 'Yellow 3' in the last weeks of the war. The aircraft carried a badge comprising a lion (the emblem of Stiemer's home city of Danzig) holding a number '3'.



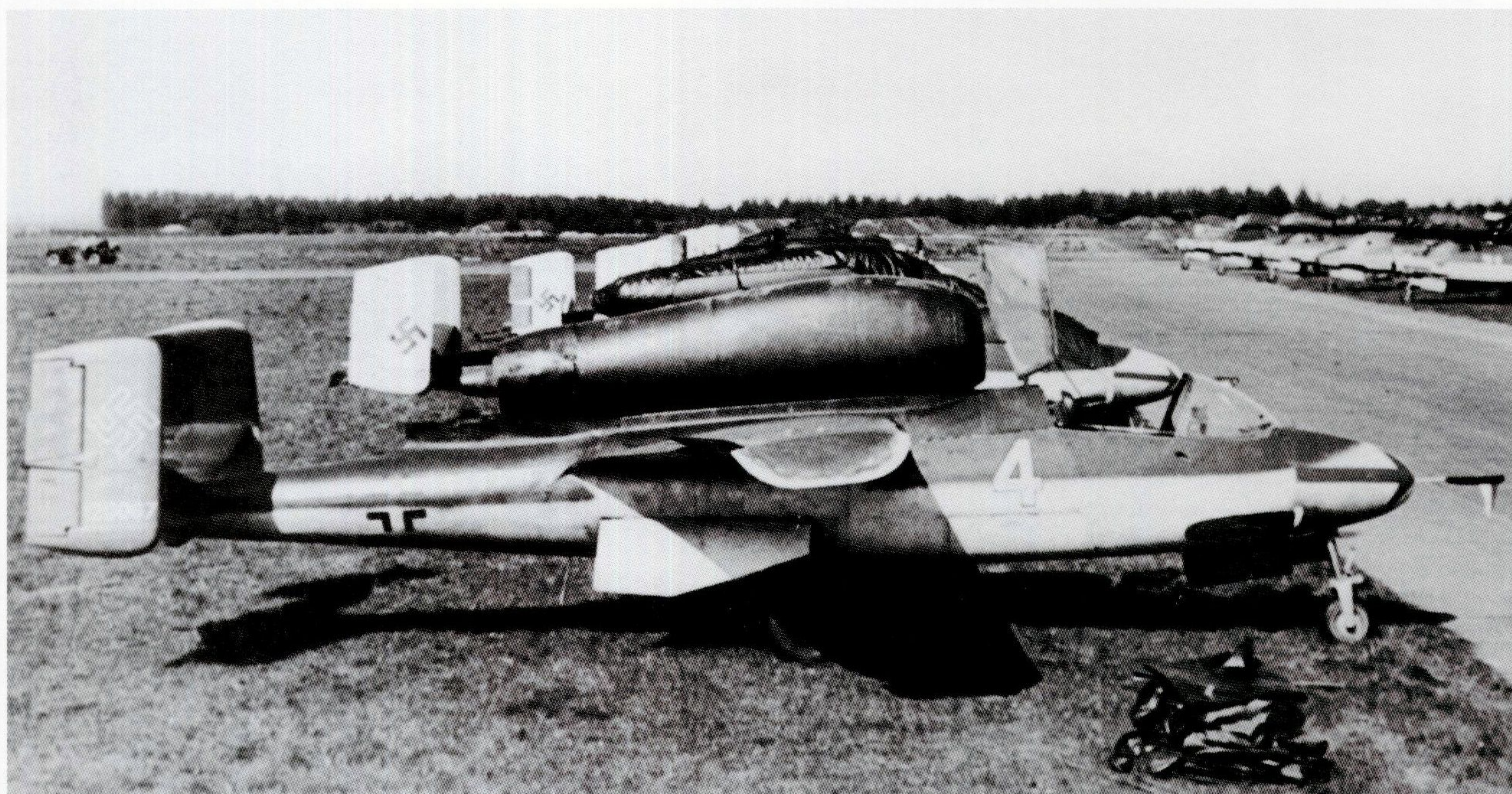
LEFT: Very few operations were flown by the He 162 A-2s of 1./JG 1 before the end of the war, and when British forces captured Leck airfield, they discovered the unit's aircraft lined up in neat rows on either side of the runway. These machines carry the badge of the unit, a black diving eagle on a yellow shield with a white diagonal band.



Heinkel He 162 A-2 (W.Nr. unknown) of 1./JG 1 at Leck, May 1945

Although most He 162s carried the standard camouflage scheme allocated to the type, the dividing line between the upper and lower surface colours varied widely. The red arrow marking was common to the He 162 but its significance is unknown.

RIGHT: It is interesting to note the differences in the camouflage patterns of these 3./JG 1 He 162 A-2s. The aircraft in the foreground, 'Yellow 4' (W.Nr. 120067), has dark green vertical tail surfaces with white outline Hakenkreuze, while most of the remaining aircraft have pale blue tails with black outline swastikas.



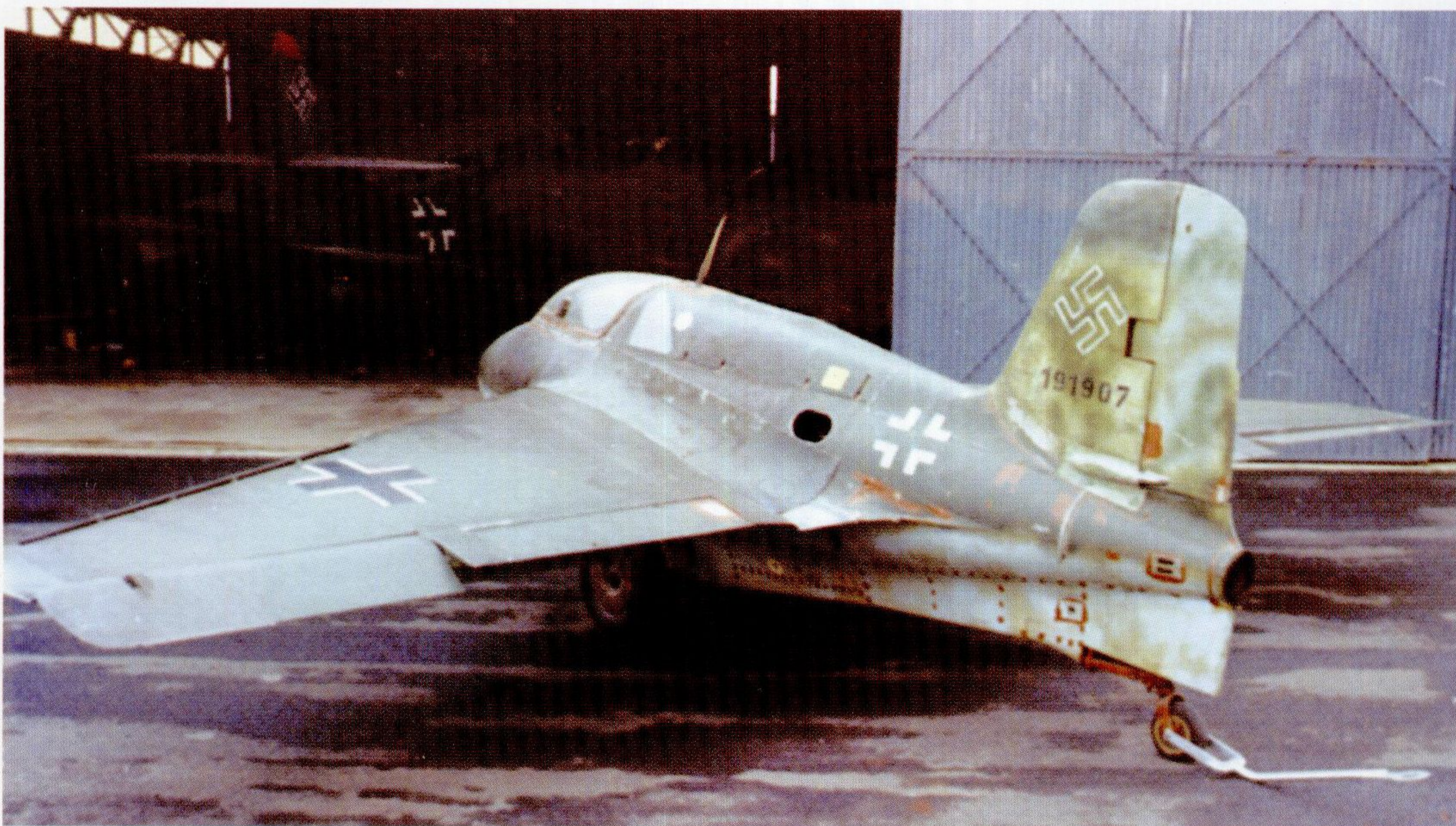
Camouflage and Markings

Beginning with the V6 and including the V7, the pre-production S1 to S7 and the production batch up to *Werknummer* 130190, all Me 262s were delivered in overall pale blue grey (RLM colour 76) finish. From the Me 262 V8 to V10 and continuing with production aircraft the splinter camouflage pattern on all upper surfaces first used on the Me 262 V1 to V5 was re-introduced. This was based on that introduced for the Bf 110 C series which was also employed for the Me 262's contemporary, the Me 210. This pattern was retained by the Me 262 until revised in 1944. Initially the colours of this pattern were dark grey (RLM 74) and medium grey (RLM 75) but, from August 1944, several combinations of greens and browns (RLM 81, 82 and 83) sometimes with medium grey (RLM 75) and occasionally green (RLM 81 and 82) fuselage mottling were introduced. By the end of the war, virtually any combination of camouflage colour and pattern could be seen on the aircraft depending on what paints were available and how much time the mechanics, then mostly operating under impossible conditions, could spend on painting their charges.

Similarly, all early Me 163s were painted RLM 76 overall but, from the middle of 1943, this was replaced by a camouflage scheme similar to that adopted for the Me 262. Like its jet contemporary, the fuselage sides of the Me 163 were usually finished in a variety of mottles or blotches of solid colour. The colours and patterns used for these finishes again varied widely, but mainly comprised combinations of various greens. Me 163s built by the Klemm company differed from those from the Messerschmitt factory in that they had a blotched camouflage pattern which covered virtually the entire fuselage. Messerschmitt-built aircraft always had the part of the fuselage below the wing painted in the undersurface colour. Undersurfaces of both the Me 163 and Me 262 were always in pale blue (RLM 76); although a late war directive had suggested those of the latter should remain unpainted to conserve oil based paints.

The official camouflage directives for the He 162, issued on 18 January and 28 February 1945 stated that the upper surfaces of the fuselage and port wing and tailplane should be painted brown violet (RLM 81) with the turbojet, top of the starboard wing and horizontal tail in medium green (RLM 82). All undersurfaces were to be pale blue (RLM 76). Although this directive was adopted, there were extensive variations in the interpretation of the positioning of the dividing lines between the upper and lower surface colours. For example, some aircraft had their vertical tail surfaces painted in (RLM 81 or 82) while others were pale blue, and some aircraft even had pale blue turbojet cowling sides ⁶.

The colours and styles of German aircraft national insignia varied widely at this time. The *Balkenkreuz* could be applied as black crosses outlined in white, as plain black outlines or as plain white outlines. The *Hakenkreuz* were applied in a similar outline format or as solid black or white markings.



Photographed at Point Cook airfield in Australia in the early 1970s, this Me 163 B-1a (W.Nr. 191907) unlike other captured German aircraft, was not repainted until 1976. It carries a similar camouflage scheme in the same colours as the Me 262 shown above but with the addition of yellowish-green primer on part of the vertical tail surfaces and patches of red oxide showing through.

6. The RLM colour references have been included as a guide, because in many cases these were not used by industry or the Air Ministry.

1944-1945

Each German aircraft had a *Werknummer* (serial number) usually painted on the vertical tail surfaces below the *Hakenkreuz*. By this stage in the war these were six-figure numbers and were allocated in batches for each manufacturer or licence builder. Those for the Me 163 and the two jet fighters were as follows:

Me 163 A	prototypes	Messerschmitt (Mtt) Augsburg	163 00 00 001 to 010
Me 163 B	prototypes	Mtt Augsburg	163 100 10 to 79
Me 163 B	production	Mtt Augsburg	191000
Me 163 B	production	Klemm, Böblingen	440000
Me 262 V1 to V5	prototypes	Messerschmitt (Mtt) Augsburg	262 000 001 to 005
Me 262 V6 to S5	pre-production	Mtt Augsburg	130001 to 130010
Me 262 A	production	Mtt Leipheim & Schwäbisch Hall	130011 onwards
Me 262 A	production	Mtt Leipheim & Schwäbisch Hall	170000
Me 262 A	production	Mtt Leipheim & Schwäbisch Hall	110000
Me 262 A	production	Mtt Leipheim & Schwäbisch Hall	111000
Me 262 A	production	Mtt Leipheim & Schwäbisch Hall	112000
Me 262 A	production	Mtt Leipheim & Schwäbisch Hall	113000
Me 262 A	production	Mtt Obertraubling & <i>Waldwerk</i>	500000
Me 262 A	production	Mtt Obertraubling & <i>Waldwerk</i>	501000
Me 262 A	production	REIMAHG Kahla	100000
He 162 M1 to M10	prototypes	Heinkel Wien	200000
He 162 A	production	Heinkel Rostock	120000
He 162 A	production	Junkers Bernburg	300000

Early production Me 163s and Me 262s and the prototype He 162s carried four letter radio call signs (*Stammkennzeichen*) painted on the fuselage sides in black; two letters on either side of the *Balkenkreuz*. The first three letters were normally issued in batches with the last letter changing in alphabetical sequence. For example the first five prototype Me 262s were coded PC+UA to PC+UE and the next 26 Me 262 production aircraft were VI+AA to VI+AZ. These letters were normally repeated below the wings, the first two letters below the starboard wing separated by the *Balkenkreuz* and the second two below the port.

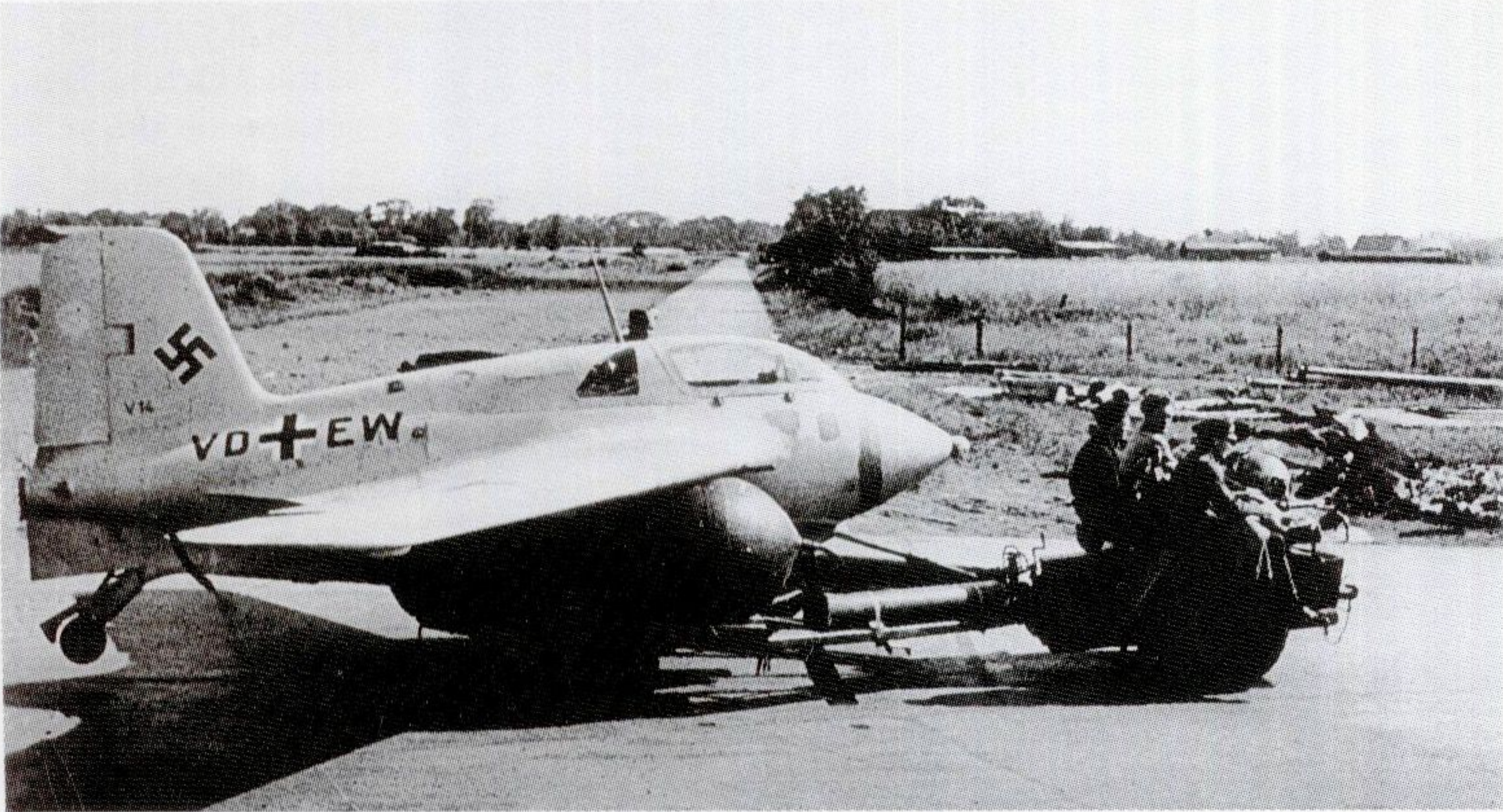
The first Me 163s operational with *Erprobungskommando 16* retained these markings including Späte's V41 which his mechanics had painted red overall. Around August 1944, the unit adopted a revised marking system in which the code 'C1' followed by a two digit number was substituted. 'C1' was painted in small black characters forward of the fuselage *Balkenkreuz* while the number, (e.g. '05') appeared much larger in white. When the *Komet* entered service with JG 400, white or yellow numbers were painted aft of the fuselage cross. Unlike most fighter units, all photographic evidence points to the fact that no use was made of red or other coloured numbers.

When the Me 262 was delivered to *Erprobungskommando 262*, this unit also employed white numbers but this time painted on either side of the fuselage just forward of the cockpit. A narrow, 300 mm wide yellow band was painted around the fuselage just behind the canopy. This form of marking was retained by *Kommando Nowotny* which had received many of its aircraft from *Erprobungskommando 262*. When the latter *Kommando* became 10./EJG 2 in November 1944, these markings were retained with the 11. *Staffel*

adopting red numbers. An example of the latter was 'Red 5' in which *Oblt.* Josef Böhm was shot down by a P-51 during a training flight on 25 February.

With the formation of JG 7 in November 1944 standard *Luftwaffe* fighter markings were adopted. Identification numbers were painted on the fuselage sides, forward of the *Balkenkreuz* their colour indicating the *Staffel* to which they belonged. White was used for the first *Staffel* within the *Gruppe*, red or black for the second and yellow for the third. The *Gruppe* itself was identified by a symbol painted behind the fuselage cross, none for the first Group, a horizontal bar for

BELOW: Most prototype and early production Me 163s and Me 262s had overall pale blue (RLM 76) finish with a four-letter *Stammkennzeichen*, or four-letter code, applied to the fuselage in black. This aircraft, the Me 163 B V14, was coded VD+EW.





ABOVE: The badge of 13./EJG 2 seen on a crashed Me 163.

A	<i>Geschwader Stab</i>	blue	K	2. <i>Staffel</i>	red	P	6. <i>Staffel</i>	yellow
B	I. <i>Gruppe Stab</i>	green	L	3. <i>Staffel</i>	yellow	R	7. <i>Staffel</i>	white
C	II. <i>Gruppe Stab</i>	green	M	4. <i>Staffel</i>	white	S	8. <i>Staffel</i>	red
D	III. <i>Gruppe Stab</i>	green	N	5. <i>Staffel</i>	red	T	9. <i>Staffel</i>	yellow
H	1. <i>Staffel</i>	white						

This marking system was retained by KG(J) 54 until late March 1945, when fighter markings similar to those used by JG 7 were adopted. III./KG(J) 6 used this style of markings from the outset. Both units also carried unit identification bands, blue and white chequers being used by KG(J) 54 and red and black by KG(J) 6.

The final fighter unit to be equipped with the Me 262, JV 44, carried simple white numbers forward of the fuselage cross with no other identification markings. Towards the end of the war several additional aircraft were received by JV 44 from other defunct units and these often retained their original colours and markings.

The markings adopted by the only operational unit to be equipped with the He 162, JG 1, comprised an individual aircraft identification number in the *Staffel* colour positioned on either side of the fuselage, just behind the cockpit. Many He 162s, but by no means all, had a large bright red arrow painted on each side of the nose, the significance of which is unknown.

Many operational jet and rocket fighter units carried some form of *Geschwader*, *Gruppe* or *Staffel* emblem. Perhaps the most familiar of these was the white running fox on a black diagonal bar superimposed on a blue shield carried by the Me 262s of JG 7. Other Me 262 *Geschwader* badges included those of KG(J) 54 and KG(J) 6. Each Me 163 *Staffel* apparently had its own badge. Known examples include 1./JG 400, 7./JG 400, 13., 14. and 15./EJG 2., and Several *Staffel* badges were carried by the He 162s of JG 1 (J-W 5-4 197) while other aircraft retained the emblem of the *Geschwader* as previously used by its Bf 109s and Fw 190s.

Apart from these markings, many of these aircraft carried coloured horizontal bands around the extreme nose. The colours of these bands usually indicated the *Staffel* and/or *Gruppe* to which the aircraft belonged.



JG 7 emblem.



KG(J) 54 emblem.



III./KG(J) 6 emblem.

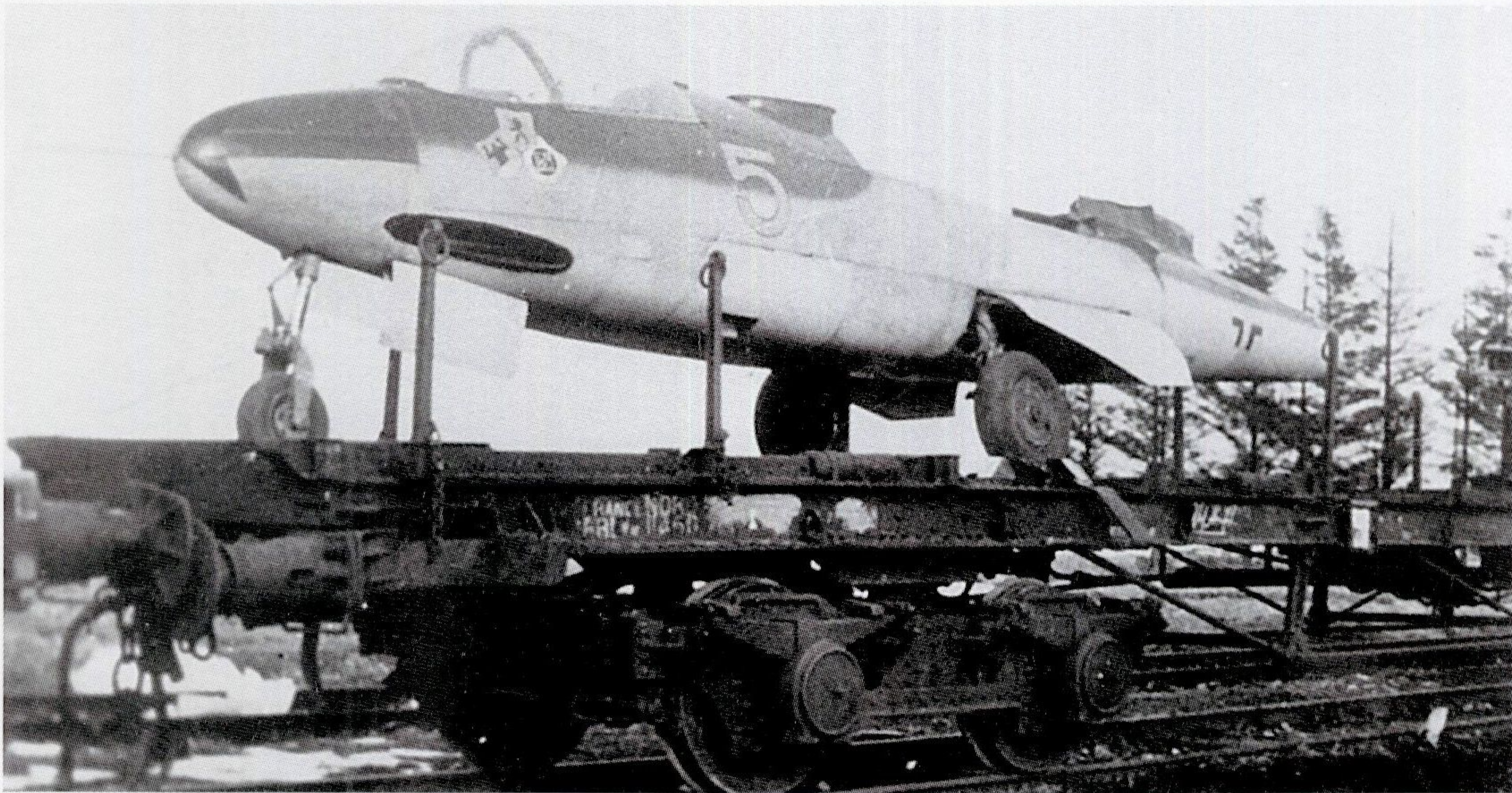


13. and 14./EJG 2 emblem.



14./EJG 2 emblem.

RIGHT: Photographed on a railway wagon just after the war, the fuselage of this 3./JG 1 He 162 carries a trio of unit badges. To the left is the pink demon emerging from the clouds (first adopted by IV./JG 1 before it became I./JG 1 on 1 April 1943). In the centre is the lion of Danzig of 3./JG 1 and to the right is the winged 'I' carried by aircraft of JG 1 from late 1943.



1944-1945

RIGHT: The first five prototypes of the Me 262 had dark and medium grey (RLM 74 and 75) uppersurfaces with pale blue (RLM 76) beneath, but subsequent aircraft were finished in pale blue (76) overall. The Me 262 V6, shown here, was the first aircraft to employ this scheme and also the first prototype to be fitted with a fully-retractable tricycle undercarriage.

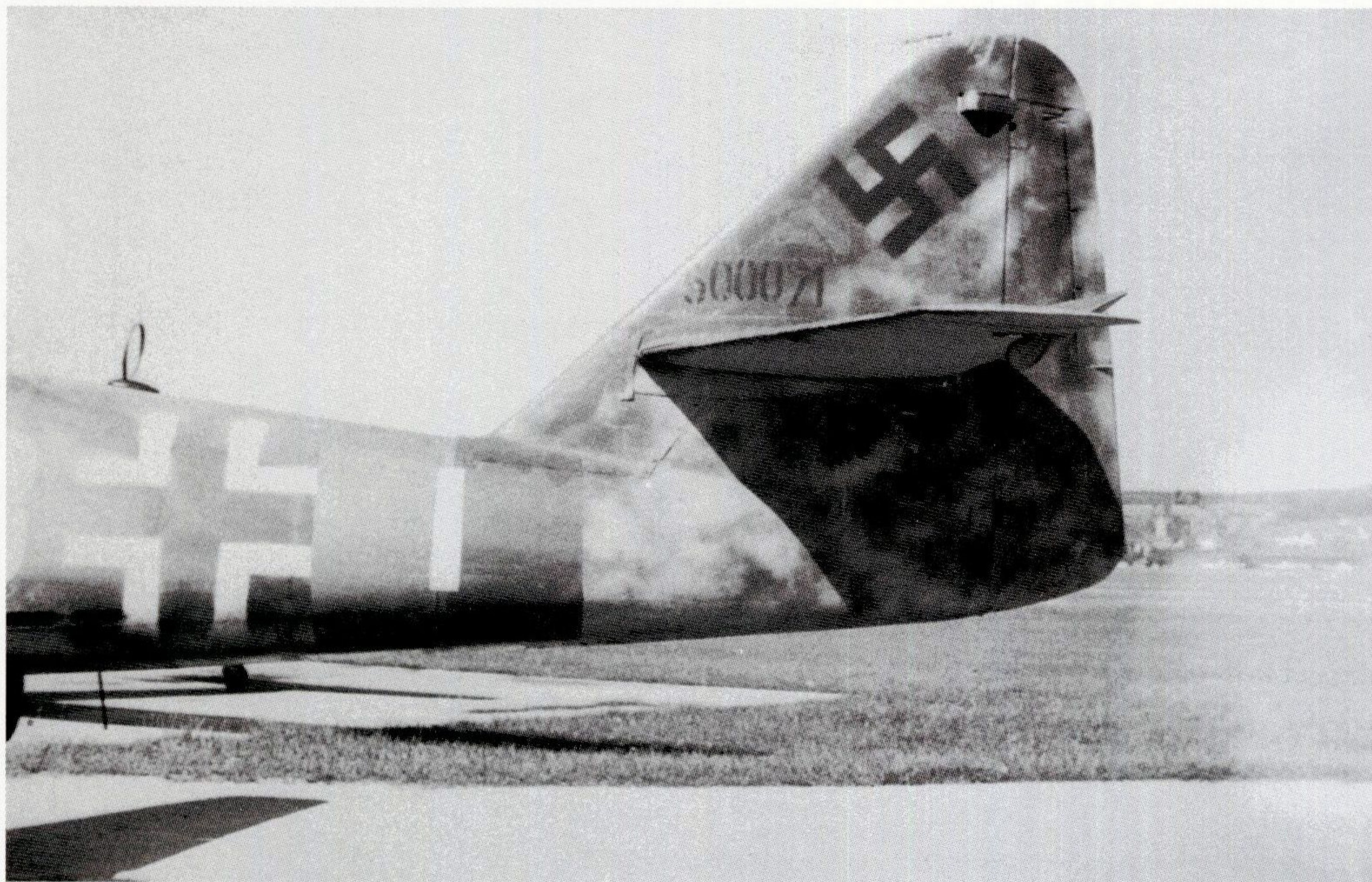


LEFT: This remarkably preserved colour photograph of a recently completed Me 262 (W.Nr. 110604) gives the student of jet fighter camouflage an excellent impression of the standard scheme employed. The uppersurfaces were in a segmented pattern of greenish brown (RLM 81) and mid-green (RLM 82) with mottling of these colours over the pale blue (RLM 76) fuselage sides. As the war drew to its conclusion many variations of this scheme appeared and by the end virtually any combination of colours could be seen.

RIGHT: The fuselage mottling applied to the sides of the Me 262 was often sprayed much more thickly than usual so that it became a part of the uppersurface colouring. This aircraft, the second Me 262 V7 (W.Nr. 170303), was employed in various tests. Its code ('V' for Versuchs or experimental followed by the last three figures of its Werknummer), 'V303', was painted on each side of the fuselage in white.



1944-1945



LEFT: In February 1945 an instruction was issued to German fighter units allocating coloured unit identification bands to each Geschwader. These bands, comprising one, two or three vertical bands of 900 mm total width were painted around the rear fuselage. The marking allocated to JG 7 was two 450 mm wide bands of blue and red. The marking is shown here on 'White 3', of 9./JG 7 which force landed in Switzerland in April 1945.

BELOW: The Me 262s operated by JG 7 carried their identification numbers on the rear fuselage, forward of the Balkenkreuz. This aircraft of 2./JG 7 has a black number '4' outline in white. Behind the fuselage cross can be seen the blue and red unit identification bands carried by the Geschwader. This wrecked aircraft has a pale coloured nose, perhaps left in natural metal before the ground crew had time to repaint.



RIGHT: Most Me 262s from both III./EJG 2 and Kommando Nowotny had a narrow yellow band painted around the rear fuselage. The tadpole-like camouflage pattern painted on the vertical tail surfaces of this aircraft was typical of that carried by these two units during the late autumn of 1944.

1944-1945



LEFT: Colonel Harold E. Watson of the US team responsible for transporting advanced German aircraft back to the USA in conversation with a Luftwaffe officer with an Me262 'Yellow 5' of 9./KG(J) 6 in the background. This unit carried red and black chequered identification bands painted around the rear fuselage.

RIGHT: The aircraft of III./EJG 2 had coloured numbers painted on the noses of their Me 262s just forward of the cockpit. This aircraft, 'Red 1', was delivered to 11./EJG 2.



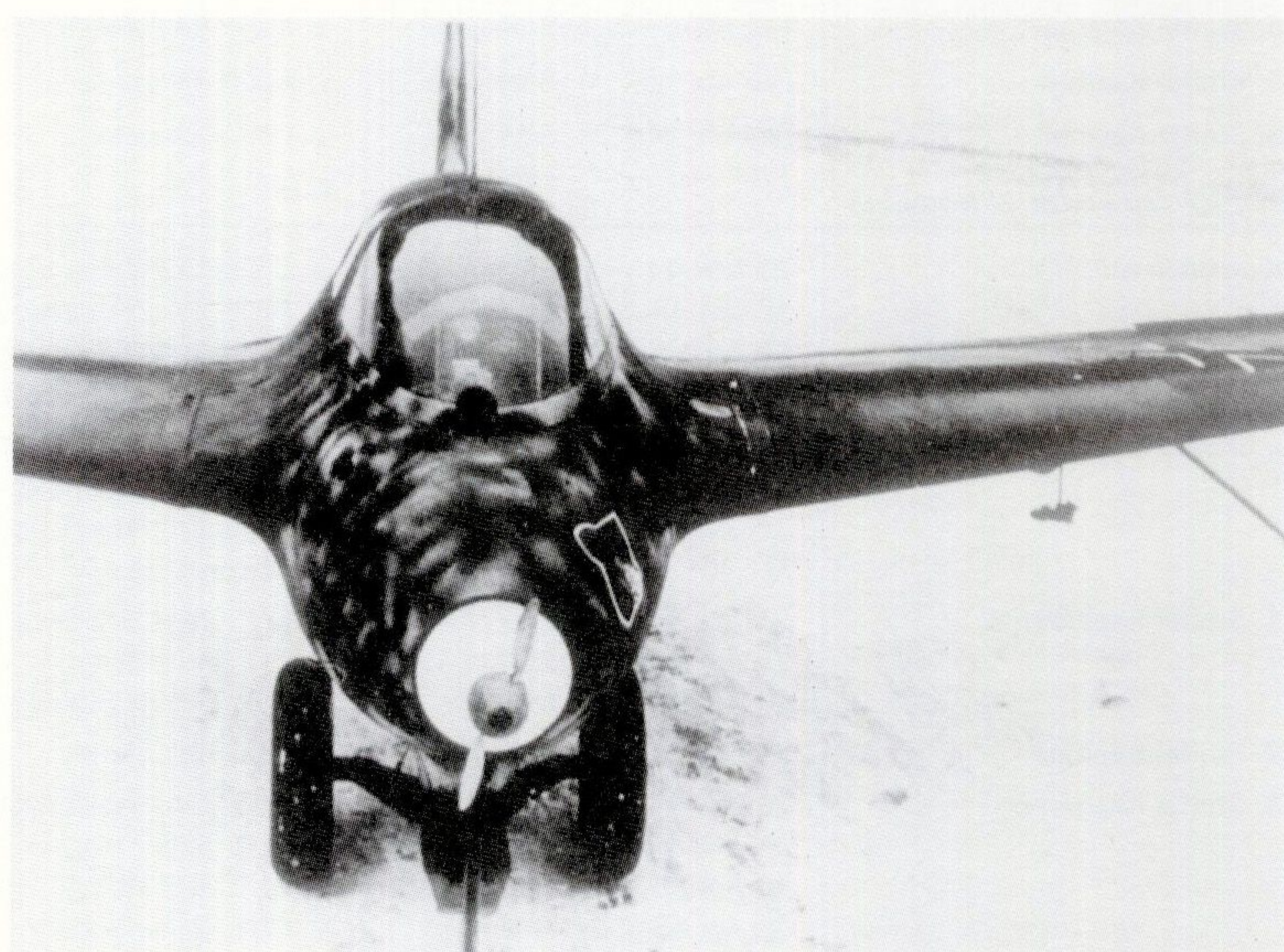
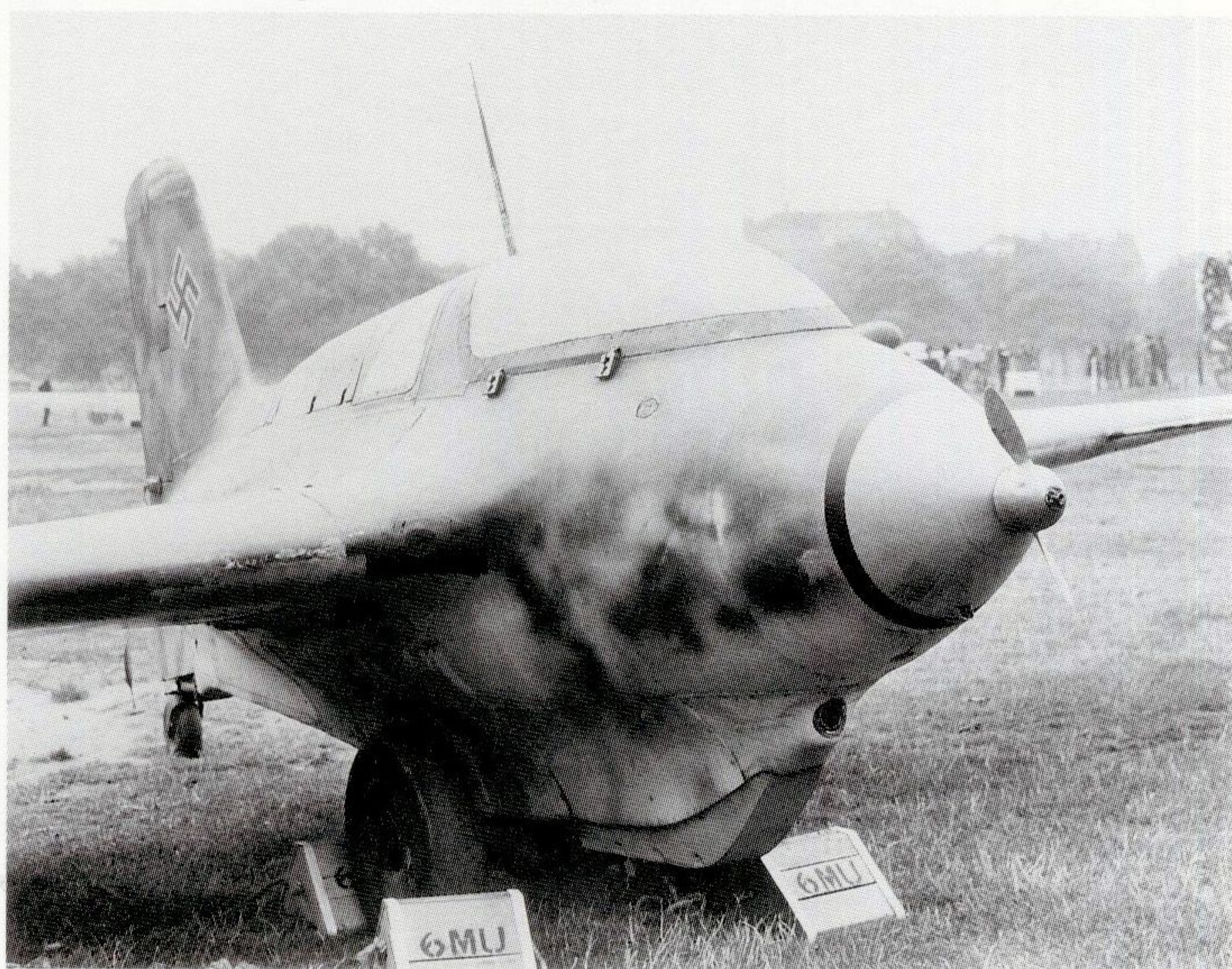
BELOW: The Werknummer (120222) was painted in black on the outside of the vertical tail surfaces of this He 162 A-2 of JG 1. From early 1943, all new Luftwaffe aircraft were allocated six digit serial numbers.





LEFT: A typical Klemm-built Me 163 coded 'White 14' of JG 400. Just below the wing can be seen the black 'T' on a white circle which indicated one of the filler points for T-Stoff. The points for C-Stoff comprised a black 'C' painted on a yellow square.

BELOW: The camouflage mottling on the sides of Me 163s built by the Klemm company extended to cover most of the fuselage undersurfaces. This aircraft has the badge of 1./JG 400 on the port side and has a white tip to the nose edged in black.



ABOVE AND RIGHT: Both JG 400 with the Me 163 and KG(J) 54 with the Me 262 adopted coloured nose bands which usually identified the Staffel to which the aircraft belonged. The Me 163 has a yellow nose indicating that it belonged to 7./JG 400 (actually the third Staffel in this unit's II. Gruppe) while the Me 262 has a band of white, black and yellow. The white indicated the first Staffel in KG(J) 54's third Gruppe (i.e. 7. Staffel) with yellow identifying that same Gruppe.



382 ● Jet Fighters and Rocket Interceptors

1944-1945

Commanders of Luftwaffe Jet and Rocket-Propelled Fighter Units

Erprobungskommando 16	May 42 Apr 44	Apr 44 4 Feb 45	<i>Oblt./Hptm.</i> Wolfgang Späte <i>Hptm.</i> Anton Thaler	to IV./JG 54
Erprobungskommando 262	9 Dec 43 Jul 44	18 Jul 44 7 Nov 44	<i>Hptm.</i> Werner Thierfelder <i>Hptm.</i> Horst Geyer	KIA to III./EJG 2
Kommando Nowotny				
Kommandoführer	26 Sep 44 Nov 44	8 Nov 44 20 Nov 44	<i>Major</i> Walter Nowotny <i>Major</i> Erich Hohagen	KIA to III./JG 7
1. Staffel	26 Sep 44 29 Oct 44	28 Oct 44 20 Nov 44	<i>Oblt.</i> Paul Bley <i>Oblt.</i> Joachim Weber	KIA to 9./JG 7
2. Staffel	26 Sep 44 5 Oct 44	4 Oct 44 20 Nov 44	<i>Oblt.</i> Alfred Teumer <i>Lt.</i> Franz Schall	KIA to 10./JG 7
3. Staffel	26 Sep 44	20 Nov 44	<i>Hptm.</i> Georg-Peter Eder	to 11./JG 7
Jagdgeschwader 1 ‘Oesau’				
<i>Dates begin at February 1945 when JG 1 began re-equipping with the He 162.</i>				
Kommodore	Feb 45	8 May 45	<i>Oberst</i> Herbert Ihlefeld	
I. Gruppe Kommandeure	Feb 45 25 Apr 45	24 Apr 45 8 May 45	<i>Hptm.</i> Paul-Heinrich Dähne <i>Major</i> Werner Zober	KIA
1. Staffel Kapitän	Feb 45	8 May 45	<i>Hptm.</i> Heinz Künneck	
2. Staffel Kapitän	Feb 45	8 May 45	<i>Hptm.</i> Wolfgang Ludewig	
3. Staffel Kapitän	Feb 45	8 May 45	<i>Oblt.</i> Emil Demuth	
II. Gruppe Kommandeur	Feb 45	8 May 45	<i>Hptm.</i> Rahe	
4. Staffel Kapitän	Feb 45	8 May 45	<i>Major</i> Bernd Gallowitsch	
5. Staffel Kapitän	Feb 45	8 May 45	<i>Hptm.</i> Bergholz	
6. Staffel Kapitän	Feb 45	8 May 45	<i>Oblt.</i> Zipprecht	
Jagdgeschwader 7 ‘Nowotny’				
Kommodoren	21 Nov 44 15 Jan 45 19 Feb 45 8 Mar 45	14 Jan 45 18 Feb 45 7 Mar 45 8 May 45	<i>Oberst</i> Johannes Steinhoff <i>Hptm./Major</i> Theodor Weissenberger <i>Major</i> Rudolf Sinner <i>Major</i> Wolfgang Späte	to JV 44 injured (<i>acting</i>)
I. Gruppe Kommandeure	25 Aug 44 21 Nov 44 15 Jan 45 Apr 45	21 Nov 44 14 Jan 45 4 Apr 45 May 45	<i>Hptm.</i> Gerhard Baeker <i>Hptm.</i> Theodor Weissenberger <i>Major</i> Erich Rudorffer <i>Oblt.</i> Fritz Stehle	to Stab/JG 7 to JV 44 (<i>acting</i>)
1. Staffel Kapitäne	21 Nov 44 16 Apr 45 21 Apr 45	15 Apr 45 20 Apr 45 May 45	<i>Oblt.</i> Hans Grünberg <i>Oblt.</i> Bohatsch <i>Oblt.</i> Gustav Sturm	
2. Staffel Kapitän	21 Nov 44	May 45	<i>Oblt.</i> Fritz Stehle	
3. Staffel Kapitäne	21 Nov 44 19 Mar 45 11 Apr 45 30 Apr 45	18 Mar 45 10 Apr 45 30 Apr 45 8 May 45	<i>Oblt.</i> Hans Waldmann <i>Oblt.</i> Walter Wagner <i>Oblt.</i> Hadi Weihs <i>Oblt.</i> Walter Schück	KIA
II. Gruppe Kommandeure	25 Aug 44 12 Jan 45 7 Feb 45 15 Apr 45	12 Jan 45 Feb 45 Apr 45 8 May 45	<i>unknown</i> <i>Major</i> Hermann Staiger <i>Hptm.</i> Ludwig Burkhardt <i>Major</i> Hans Klemm	
III. Gruppe Kommandeure	19 Nov 44 15 Jan 45 5 Apr 45	14 Jan 45 4 Apr 45 8 May 45	<i>Major</i> Erich Hohagen <i>Major</i> Rudolf Sinner <i>Major</i> Johannes Naumann	injured
9. Staffel Kapitäne	21 Nov 44 22 Mar 45 15 Apr 45	21 Mar 45 14 Apr 45 3 May 45	<i>Oblt.</i> Joachim Weber <i>Lt.</i> Erwin Stahlberg <i>Lt.</i> Fritz Müller	to 11./JG 7
10. Staffel Kapitäne	21 Nov 44 11 Apr 45	10 Apr 45 3 May 45	<i>Oblt.</i> Franz Schall <i>Oblt.</i> Franz Kulp	
11. Staffel Kapitäne	21 Nov 44 Feb 45 19 Mar 45 14 Apr 45	15 Feb 45 18 Mar 45 30 Mar 45 3 May 45	<i>Hptm.</i> Georg-Peter Eder <i>Oblt.</i> Günther Wegmann <i>Lt.</i> Karl Schnörrer <i>Oblt.</i> Erwin Stahlberg	injured injured
Jagdverband 44				
Verbandsführer	Jan 45 27 Apr 45	26 Apr 45 8 May 45	<i>Gen.Lt.</i> Adolf Galland <i>Obstlt.</i> Heinz Bär	injured
Jagdgeschwader 400				
Kommodoren	27 Dec 44	7 Mar 45	<i>Major</i> Wolfgang Späte	to Stab/JG 7
I. Gruppe Kommandeure	20 Aug 44 1 Nov 44 27 Dec 44 Feb 45	31 Oct 44 Dec 44 Feb 45 19 Apr 45	<i>Major</i> Wolfgang Späte <i>Hptm.</i> Rudolf Opitz <i>Hptm.</i> Wilhelm Fulda <i>Hptm.</i> Albert Falderbaum	to Stab/JG 400 (<i>acting</i>)

1. Staffel Kapitäne	24 Apr 44 Apr 44 May 44 Aug 44 Dec 44 Feb 45	Apr 44 May 44 Jul 44 Nov 44 Feb 45 19 Apr 45	<i>Hptm.</i> Robert Olejnik <i>Hptm.</i> Otto Böhner <i>Oblt.</i> Rudolf Opitz <i>Hptm.</i> Robert Olejnik <i>Hptm.</i> Albert Falderbaum <i>unknown</i>	injured injured injured to IV./EJG 2 to I./JG 400
2. Staffel Kapitäne	Jul 44 Feb 45	Feb 45 Apr 45	<i>Hptm.</i> Otto Böhner <i>Hptm.</i> Johannes Polzin	
3. Staffel Kapitäne	20 Aug 44	Apr 45	<i>Oblt.</i> Franz Rösle	
4. Staffel Kapitäne	Sep 44 Nov 44 ?	11 Nov 44 Apr 45	<i>Oblt.</i> Franz Woidlich <i>Hptm.</i> Heinrich Sturm	to 6./JG 400
II. Gruppe Kommandeure	12 Nov 44	8 May 45	<i>Hptm.</i> Rudolf Opitz	
5. Staffel Kapitäne	12 Nov 44 Nov 44	Nov 44 May 45	<i>Hptm.</i> Jochen Langen <i>Oblt.</i> Franz Woidlich	
6. Staffel Kapitäne	12 Nov 44 Nov 44	Nov 44 May 45	<i>Oblt.</i> Franz Woidlich <i>Lt.</i> Peter Gerth	to 5./JG 400
7. Staffel Kapitäne	12 Nov 44	May 45	<i>Lt.</i> Reinhard Opitz	
Ergänzungsstaffel Kapitäne	21 Jul 44 Sep 44	Aug 44 Dec 44	<i>Oblt.</i> Franz Medicus <i>Hptm.</i> Nocher	
Kampfgeschwader (Jagd) 6				
Kommodoren	11 Sep 43	8 May 45	<i>Obstlt.</i> Hermann Hogeback	
III. Gruppe Kommandeure	44 Mar 45	26 Mar 45 8 May 45	<i>Hptm.</i> Hans Baasner <i>Hptm.</i> Günter Overdieks	to I./KG(J) 54
7. Staffel Kapitäne	44 Apr 45	27 Apr 45 8 May 45	<i>Oblt.</i> Henning Guide <i>unknown – possibly not replaced</i>	KIA
8. Staffel Kapitäne	44	8 May 45	<i>unknown</i>	
9. Staffel Kapitäne		Mar 45 8 May 45	<i>Hptm.</i> Günter Overdieks <i>unknown</i>	to III./KG(J) 6
Kampfgeschwader (Jagd) 54				
Kommodoren	1 Apr 43 27 Feb 45	9 Feb 45 8 May 45	<i>Obstlt.</i> Volprecht Riedesdel <i>Fhr.</i> zu Eisenbach <i>Major</i> Hans-Georg Bätcher	KIA
I. Gruppe Kommandeure	5 Oct 43 26 May 45	25 Mar 45 8 May 45	<i>Major</i> Ottfried Sehrt <i>Hptm.</i> Hans Baasner	injured
1. Staffel Kapitäne	16 Apr 44 11 Apr 45	7 Apr 45 8 May 45	<i>Hptm.</i> Werner Tronicke <i>Oblt.</i> Ludwig Beck	injured
2. Staffel Kapitäne	21 Aug 44 Apr 45	31 Mar 45 8 May 45	<i>Oblt. Dr.</i> Heinz Oberweg <i>unknown</i>	MIA
3. Staffel Kapitäne	9 Jun 44 22 Feb 45 11 Apr 45	21 Feb 45 10 Apr 45 8 May 45	<i>Oblt.</i> Christian Wunder <i>Oblt.</i> Greiner <i>unknown</i>	KIA to 7./KG(J) 54
II. Gruppe Kommandeure	25 Oct 44 5 Jan 45	4 Jan 45 8 May 45	<i>Major</i> Helmut Stamm <i>Hptm.</i> Ernst Petzold	
4. Staffel Kapitäne	25 Oct 44	8 May 45	<i>Hptm.</i> Werner Brandau	
5. Staffel Kapitäne	25 Oct 44 6 Jan 45	5 Jan 45 8 May 45	<i>unknown</i> <i>Hptm.</i> Herbert Spadiut	
6. Staffel Kapitäne	9 Feb 45 1945	1945 8 May 45	<i>Hptm.</i> Helmut Kornagel <i>Hptm.</i> Horst Rosenberg	
III. Gruppe Kommandeur	10 Oct 44	8 May 45	<i>Hptm.</i> Eduard Brogsitter	
7. Staffel Kapitäne	10 Nov 43 9 Feb 45 11 Apr 45	8 Feb 45 10 Apr 45 8 May 45	<i>Hptm.</i> Helmut Kornagel <i>Oblt.</i> Leopold Beck <i>Oblt.</i> Greiner	
8. Staffel Kapitäne	4 Jul 44	8 May 45	<i>Oblt.</i> Heinz Rall	
9. Staffel Kapitäne	5 Oct 43	8 May 45	<i>Oblt.</i> Heinrich Schäfer	
Ergänzungsjagdgeschwader 2				
III. Gruppe Kommandeure	7 Nov 44 12 Nov 44 Jan 45	11 Nov 44 Jan 45 27 Apr 45	<i>Hptm.</i> Horst Geyer <i>Oblt.</i> Ernst Wörner <i>Major</i> Heinz Bär	(acting) to JV 44
9. Staffel Kapitän	7 Nov 44	27 Apr 45	<i>unknown</i>	
10. Staffel Kapitän	7 Nov 44	27 Apr 45	<i>Major</i> Hans Grötzinger	
11. Staffel Kapitäne	7 Nov 44 Nov 44 26 Feb 45	16 Nov 44 25 Feb 45 27 Apr 45	<i>Oblt.</i> Werner Glomb <i>Oblt.</i> Josef Böhm <i>unknown</i>	KIA KIA
IV. Gruppe Kommandeur	Dec 44	Mar 45	<i>Hptm.</i> Robert Olejnik	
13. Staffel Kapitän	2 Nov 44	28 Feb 45	<i>Oblt.</i> Adolf Niemeyer	
14. Staffel Kapitän	2 Nov 44	Mar 45	<i>Lt.</i> Hermann Ziegler	
15. Staffel Kapitän	2 Nov 44	Jan 45	<i>Hptm.</i> Erwin Sturm	

1944-1945

Could the jets have made a difference?

Although it possessed an exceptional speed and climbing performance, the Me 163 suffered from two major problems. Firstly, its extremely limited range and endurance meant that after its fuel was exhausted, it became vulnerable to Allied fighters. Secondly, the very nature of its fuels made it extremely dangerous to fly. It could explode at the slightest provocation and one component of its fuel caught fire on contact with any organic substance including human skin. These problems meant that relatively few operational sorties were flown by the Me 163 after the end of August 1944.

The jet fighters were a very different proposition. They too possessed exceptional performances, but could they have changed the course of the air war over Germany? The authors think not. Perhaps if the Me 262 had been produced in numbers a year earlier, things would have been different, but the problem was that its engines were not developed to a stage where this could have been made possible.

Much has been made of Hitler's edict that the Me 262 be used as a bomber. His idea, which may not have been unreasonable, was for the aircraft to sweep unopposed over the invasion beaches, hurling bombs, and causing maximum disruption at what would have been a critical time for German forces. Even if his edict had not interrupted the supply of the Me 262 to the fighter units, it is doubtful that the aircraft could have been delivered to them in sufficient numbers to significantly hamper the Allied bombing offensive of the Reich.

Another problem facing the jet fighter was the fuel situation. Although the fuel needed – a type of refined diesel known as J2 – was easier to produce than high octane petroleum, it was never available in sufficient quantities to allow unhampered delivery to the *Jagdwaaffe*. During the latter stage of the war, production of both the Me 262 and He 162 was not a problem due to the clever dispersal of their factories underground or to forest locations. The supply of sufficiently trained pilots was a different matter, however. Many of the best had been killed in the air battles of 1944, and the fuel and aerial situation severely restricted the training of replacements. All these factors prevented the *Luftwaaffe* jet fighter from making the impact it might have had before the end of the war.

An Fw 190 forms a broken and twisted symbol of the Luftwaaffe in defeat in the shadows of the bombed-out Reichstag building in Berlin in late May 1945.

